SDMS US EPA REGION V -1

SOME IMAGES WITHIN THIS DOCUMENT MAY BE ILLEGIBLE DUE TO BAD SOURCE DOCUMENTS.

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION AND CHARACTERIZATION WORKSHEET

SWMU #1

Facility:	Monsanto-Kru	mmrich	Date:	ze, age, dates of operations a 20,000 gallon steel th phenol and other where is was stored until 400). This tank was taken in Chlorobenzene service. chemical name, EPA Hazardou ge, etc.]): Wastewater cor age, structural integrity ge, topography):	
Inspector:		 	Photo Taken:	Y N to NSEW	
Unit Name:	Phenol Tank,	Item #405			
LDF Unit: 3	or N	Type of Un	it: Wastewater S	torage Tank	
Location (id	dentify depara	mtent and or	ientation of unit): The tank sits	
20 feet sou	thwest of Bui	lding BR.	····		
					
Unit charact	eristics (cors initiated in	istruction, on to unit): $\frac{T}{T}$	capacity, size, agank #405 was a 20	re, dates of operation,	
tank (above	ground). Was	tewater cont	aminated with phe	nol and other	
phenolic co	mpounds were	directed int	o the tank, where	e is was stored until	
being pumpe	d into the tr	eatment tank	s (209 and 400).	This tank was taken	
out of phen	ol service in	1981 and is	currently in Chl	orobenzene service.	
Waste Code,	physical sta	te [solid, l	iquid, sludge, et	cal name, EPA Hazardous c.]): Wastewater con-	
taminated w	ith phenol an	d other pher	olic compounds.		
Surface des	scription (co ontainment de	ncrete, aspl scription, i	nalt, etc., age, ntegrity, age, to	structural integrity,	
Tank 405 sa	t on a concre	te pad with	6"-8" curb.		
		-			

Facility:	Monsar	to-Kru	mmrich			Date:	e: 9/16/92								2	
Inspector:						Photo	r	aken:	,	Y	N	to	N a	S E	W	
Unit Name:	Dept.	237 Ta	nk, It	em	#400					· · · ·						
LDF Unit:	or or	N	туре	of	Unit	Wastewa	ter	Treatmen	nt Ta	nk (Acid	ifier)				
Location (id	dentify	depar	mtent a	and	orie	tation	01	f unit	:):	_	Thi	s t	ank	sa	t :	just
west of Tan	k 210.															
Unit charact how waste is	t eristi s initi	cs (com	nstruct	tion	Tan	acity, k 400 w	si as	ze, a a 2,	ge,	d	ate all	s of	op glas	era	ti li	on,
steel tank	with ar	agita	tor.	Was	tewat	er from	Т	ank 4	05	an	d 1	esi	due	fr	om	
Tank 210 wa	s char	ged to	Tank 4	00.	The	mixtur	e .	was a	git	at	ed	and	al:	Low	ed	to
settle. Af	ter set	tling	the wa	ter	was	decante	d	to th	e s	ew	er	, an	d re	esi	du	e to
Tank 209 (s	ee SWMU	J #3).	Tank w	as	in se	rved fr	on	1979	to	1	98:	l, a	nd s	set	<u>i</u>	dle
until 1985	and was	s disma	antled.	in	1985.											
Wastes Manag Waste Code, taminated w	physic	al sta	te (so	lid	, liq	uid, slu	ud	g e , e	tc.])	: _	Vast	ewa			lous con-
			<u></u>													 -
Surface des secondary c	ontainm	ent de	script	ion	, int	egrity,	a	ge, t	opo	gr	aph		. ir	nte	gr	ity,
					· · · · · · · · · · · · · · · · · · ·											
				· 	·		_			-						
					·											

Facility:	Monsa:	nto-Kru	mmrich		Date: 9/16/92								2			
Inspector:						Photo		Taken:	:	Y	N	to	N	s I	E '	พ
Unit Name:	Depar	tment 2	37 Tank	k It	em #2	09									_	_
LDF Unit:	Y or	N	Туре	of	Unit:	Wastewat	ter	Treatmen	it T	ank	(neut	ralized	1)			_
Location (i	dentif	y depar	mtent a	and	orien	ation	0	f unit	t)	:	Thi	s ta	ink	wa	s	_
located wes	t of t	ank #21	.0.													
						·····										<u></u>
Unit charac	terist s init	ics (co iated i	nstruct .nto uni	ion	, capa Tank	city, #209 w	si wa	i ze, a s a 2	ge , 0	00	d ate gal	s o	gla	er ass	at	ion,
lined steel	tank.	The pr	ecipita	ate	from	tank #4	40	0 was	_c	hai	ged	in	co t	tan	k	209
were it neu	traliz	ed with	lime.	The	mate	rial th	ne	n was	<u>q</u>	ump	ped	bacl	c to	o t	an	k
#410 where	it was	stored	until	dis	posal	. Tank	k_	was i	n	sei	cvic	e f	rom	19	79	
to 1981. T	ank sa	t idle	until 1	1985	when	it was	s_	disma:	nt	lec	<u>1.</u>	···				
Wastes Mana Waste Code, from tank 4	physi	cal sta	ate [so]	lid,	liqu		ud	lg e , e	tc	•]): <u>I</u>	rec	<u>ipi</u>			:dous
		·		<u>-</u> ,	· .								, ————————————————————————————————————			-
Surface de secondary d Tank 209 sa	contain	ment d	escript	ion,	, inte	grity,	а	ige, t	oţ	og	rap			nte		rity,
			·	• 4												

Facility:	Monsar	nto - K	rummrich		Date:						9	/11/92
Inspector:					Photo	Taken:	Y	N	to	N	S E	W
Unit Name:	Mercui	ry Reco	very Prod	cess; W	astewat	ter Pret	rea	tme	nt			
LDF Unit: 3	or or	N	Type of	Unit:	Waste	ewater 1	rea	tme	nt		_	
Location (id	lentify	deparm	tent and	orient	ation	of unit):	Th	is f	aci	lit	y_was
located in	the Ch	lor/Alk	ali Depai	rtment	in the	southea	aste	rn s	sect	ion	of	the
plant.				.				<u></u>	•			
Unit charact how waste is	ceristi s initi	cs (con ated in	struction nto unit)	n, capa : This	city, s	s ize, a g water pi	e, c	iate eati	s of	op un	era it	tion,
permitted b	y the	IEPA un	der the	CWA of	1977.	Its per	cmit	nui	mber	wa	s	
1984-EP-298	1. Th:	is trea	tment un	it redu	ced the	e mercu	cy l	eve	l by	a	2 s	tep
process, ir	volvin	g a cla	rifier a	nd reac	tor ale	ong with	n ad	dit	iona	l p	roc	ess
of auxillia as RCRA haz dismantled	ardous	wastes	. The C			om this ept. was						ndled
Wastes Manae Waste Code, contaminate	physic	al stat										irdous ——
Surface des	scriptions ontains	on (con nent de	ncrete, a scription	asphalt , inte	, etc. grity,	, age, age, to	str pog:	uct	ural ny):	iı	ate	grity,
			· · · · · · · · · · · · · · · · · · ·									
				· · · · · · · · · · · · · · · · · · ·								
	- -		<u></u>	· · · · · · · · · · · · · · · · · · ·	 	·						
· <u>·</u>				•								

Facility:	Monsanto	- Krummrich	Date:			·	<u>9</u> /11/92
Inspector:			Photo	Taken:	Y N	to N	SEW
Unit Name:	Mercury R	ecovery Proc	ess; Wastewa	ter Pret	reatme	nt	
LDF Unit: Y	or N	Type of	Unit: Wast	ewater T	reatme	nt	
Location (id	lentify dep	armtent and	orientation	of unit)	: <u>Th</u> :	is fac	ility was
located in	the Chlor/	Alkali Depar	tment in the	southea	stern :	sectio	n of the
plant.							
Unit charact	eristics (initiated	construction into unit)	t, capacity, This waste	size, age water pr	e, date	es of o	peration, nit was
permitted b	y the IEPA	under the C	CWA of 1977.	Its per	mit nu	mber w	as
1984-EP-298	1. This t	reatment uni	t reduced th	e mercur	y leve	l by a	2 step
process, in	volving a	clarifier ar	nd reactor al	ong with	addit	ional	process
of auxillia as RCRA haz dismantled	ardous was	tes. The Ch	collected fr nlor/Alkali d				
	physical		on, commercia, liquid, sl				
Surface des	cription ontainment	(concrete, a description	sphalt, etc, integrity,	., age, age, top	struct	ural	integrity,
				····			

Facility:	Monsar	nto-Kri		Date:							<u>9</u> /1	.0/92	
Inspector:					Photo	Taken	Y	N	to	N	s	E W	ī
Unit Name:	Steame	er Over	chead Tan	k – Ite	m 407								-
LDF Unit:	Y or	N	Type of	Unit:	Stor	age Tar	ık						-
Location (i	dentify	depar	ntent and	orient	ation (of unit	:):	The	e ste	eame	rc	ove	rheac
tank was l	ocated :	in Depa	artment 2	38.			<u>.</u>						
				····	.								
Unit charac	teristions in the second secon	cs (cor ated in	nstruction nto unit)	n, capac : The	city, s steame	s ize, a r overl	ge, lead	d ate tan	s of	ten	er 1 4	07,	l on, was
a 15,000 g	allon R	FP (Fi)	perglass	Reinfor	ced Pl	astic)	tan	٠.	The	tar	ık_	was	<u> </u>
entirely a	bove gro	ound a	nd diked.	The w	aste s	tored	in th	ne t	ank	was	; a	n	
ignitable	waste (I	0001) 8	and was g	enerate	d from	the d	isti	llat	ion	of	bu	ty]	<u> </u>
benzyl pht Chloride, from servi	and Trie	ethyla	compositi mine. Th	on of t	he was was de	te was	Bu'	ano ed a	l, E	Benz emo	yl ove	ed	
Wastes Mana Waste Code,	physic	al sta	te [solid	l, liqui	.d, slu								dous
			***************************************				• • • • • • • • • • • • • • • • • • • •						
Surface de										. i	nt(egr	ity,
The tank s	at behi	nd a c	oncrete a	ind reba	r dike	: .	····						
						·							
							<u> </u>						
-			***	,									

Facility:	Monsan	to-Kru	mmrich		Date:	Pacility: Monsanto-Krummrich Date:						9,	/10/92
Inspector:					Photo	Taker	a:	Y	N	to	N s	S E	W
Unit Name:	Benzyl	Chlor	ide Resid	lue Tar	nk, Ite	m 189							
LDF Unit: Y	or	N	Type of	Unit:	Stor	age Ta	nk						
Location (id	l entify Departm	deparm ent 22	etent and 9.	orien	tation	of un:	it):		Tar	nk #	189	was	<u>s</u>
Unit charact	eristic initia	s (con	struction	n, capa : Tan	acity, < #189	s ize, was a	age 14,	, d	ate) ga	s of	e op	era RP	tion,
(Fiberglass	Reinfo	rced P	lastic).	This	was wa	s enti	rel	y a	rods	/e g	rou	nd -	and
diked. The	tank w	as rem	oved from	n serv	ice in	1982.			_				
					·.								
			_										
	· · · · · · · · · · · · · · · · · · ·				· · · · ·								·
Wastes Manag Waste Code,	ged (pro	cess d	escriptions escriptions	on, com , liqu	mercia id, slu	l chem	ica etc	1 n	ame	, EI The	tan	aza k s	rdous tored
a waste tha	t had h	azardo	us const	ituent	s. The	compo	sit	ior	n 0:	f th	is 1	K01	5
liquid wast	e is as	follo	ws: 75%	Benza	l Chlor	ide;	15%	Bei	nzy	l Ch	lor	ide	;
10% Highboi	ls.												
Surface des secondary co	ontainm	ent des	scription	, inte	grity,	age,	top	ogr	aph	y):			grity,
4.7.													

Facility: Monsanto-Krummrich		Date:			 -	_		9/:	3/92
Inspector:		Photo Tak	en:	Y	N	to	n s	E	W
Unit Name: Department 224/233	Drum Accu	mulation A	Area						_
LDF Unit: Y or N Type	of Unit:	Drum Acci	nulat	ion	Are	ea_			
Location (identify department a area for Dept. 224 is north sid Road. Dept. 233 has two areas,	de of 3rd	street jus	st we	est	of 1	Fall	ing	Spi	rings
and at 4th and D Streets north	east corne	r.					·		
Unit characteristics (construct how waste is initiated into uni									ion,
233's pads are constructed of	asphalt.	The pads a	are r	not	bur	med	or	dik	ed.
These areas are waste accumula	tion sites	. Wastes	that	ar	e ge	ener	ate	d,	
packaged, and labelled in the u	nits are r	laced on p	alle	ts a	it t	hese	10	cat	ions.
The drums may be kept here for transferred to BBU waste warehestorage activity occurred at the storage activity occurred at the stor	ouse from	these area							te
Wastes Managed (process descrip Waste Code, physical state [so generates wastes associated wi wastes associated with Chlorob contaminated debris, off-spec	lid, liqui th Nitroch enzene. V	d, sludge, nlorobenze Waste inch	ne, I udes	Dept	2 an	ept. 33 c d Th	22 ene	4 rat ino	or 1,
D027, and D008.									
Surface description (concrete secondary containment descript	, asphalt ion, integ	, etc., age	ge, , to	str	uctu aph	ral	in	teg	rity,
Department 224's pad is concre	te. Both	of Depart	ment	233	pa	ds a	re		
construction of asphalt.									
-	.,								

Facility:	Monsan	to-Kru	mmrich			Date:		9	/16/	92				
Inspector:				·		Photo	Taken:	Y	N	to	N	S E	w	
Unit Name:	Depart	ment 2	37 Stor	age '	Tank,	Item	410							
LDF Unit: 3	or	N	Type o	of Ur	it:	Stora	ige Tank							
Location (id	lentify	deparm	ntent ar	nd or	cienta	ation	of unit) :	Nor	the	ast	sid	le o	f
Department	237.								<u></u>					_
			···											-
Unit charact how waste is	eristio s initia	s (con	structi nto unit	lon, t):	capac Tank	ity, s	s ize, ag residue	e, o	iate m th	s of	op	era L po	tion	i, f
Department	237. It	em #41	0 tank	was	16,00	0 gall	lon stee	1 t	ank	and	sat	: be	hin	d
a concrete	dike an	d a co	ncrete	pad.	Tan	k was	put int	0 S	erv	ice	in 1	1979	an	d
shutdown in	1981.	The t	ank was	dis	mantl	ed in	1982.							
			,	-										
					•		-		., -					
Wastes Manag Waste Code,														
Parachlorop			•	,			,	•	_					_
	· · · ·													_
							· · · · · · · · · · · · · · · · · · ·	· , ,						
Surface des											ir	ıteç	rit	у,
Tank sat on	a conc	rete b	ase beh	nind	a 4'	concr	ete dike	· .						•
														
					 -			······································						_
- -				٠ <u>.</u>		<u> </u>								

Facility:	Monsant	o-Krum	mrich		Date:	ate: 9/3/92									
Inspector:		- ·		···	Photo	Taken:	Y	N	to	N 8	E	W			
Unit Name:	Departm	<u>ent 24</u>	5 Drum A	ccumula	tion Ar	ea					-				
LDF Unit:	Y or	N	Type of	Unit:	Accumu	lation	Site	<u> </u>				_			
Location (i	dentify	deparm	ntent and	orient	tation	of unit)): I	orum	ı a	ccum	ula	<u>ti</u> on			
site is loca	ated on t	he sou	thwest s	ide of	the dep	artment	. (P	hot	o wa	s ta	ıker	of			
tote bin lo	t, this	is whe	re produ	ct is s	tored b	pefore i	t is	s sh	ipp	ed.)					
Unit characterial															
is approxim															
department from this s	ite to B	BU war	e wareho	use. Ma	ximum s	storage	time	e at	: t <u>h</u>	is p	ad	is			
3 days. The However, the												ι.			
product tha												ot			
considered															
Considered	wasce.						-								
Wastes Mana Waste Code															
handled at	this sit	e incl	ude those	e that	are ass	<u>oçiated</u>	wit	h t	he m	anui	ac	ture			
of Phosphor D002), wast															
and Phospho	rus Sulf	ide (t	J189).												
Surface de	scriptic containm	on (co: ent de	ncrete, scriptio	asphalt n, inte	etc.	, age, age, to	str pogi	uct	ural	. in	teç	rity,			
Pad is cons	tructed	of asr	halt/con	cret.								·			
					· · · · · · · · · · · · · · · · · · ·										
					· 										
															

Facility:	Monsant	co-Krum	mrich		Date:		·	· · · · ·	 -		9-	-14-92
Inspector:				<u></u>	Photo	Taken	Y	N	to	N 8	S E	W
Unit Name:	Methyl	Iso Bu	tyl Ket	one Res	idue Ta	nks #2	32,	268	and	271	<u> </u>	_
LDF Unit:	Y or	N	Type of	Unit:	Waste	Stora	ge T	anks	5			
Location (id	dentify	deparmt	ent and	orient	ation o	of unit	:):	The	Met	hy]	l Is	<u>:0</u>
Butyl Ketor	ne tanks	were l	ocated	in Depa	rtment	247.						
	····	·· <u>·</u>						·				
Unit characthow waste is	teristic: s initia	s (cons ted int	tructio	n, capa : MIBK	city, s residu	ize, a le tank	ge, d	date tem	s of #232	op	era	tion,
271, were o	construct	ced of	carbon	steel a	nd had	capaci	ties	of	3,00	00,	225	50
and 3,000 c	gallons 1	respect	ively.	The res	idue st	ored i	n th	ese	tan	s į	vas	the
result of t	the recov	very of	ketone	reacta	nts. Cl	osure	cert	ific	catio	on v	vas	
mailed to t	the agend	y in F	ebruary	1989.	The tan	ks rec	eive	d c	losui	e :	in :	1990.
												
Wastes Manae Waste Code,	ged (pro physica	cess de l state	scripti (solic	on, com i, liqui	mercial .d, slu	chemi ige, e	cal tc.]	name	, EP	A H	aza idue	rdous e was
composed of	f either	MIAK (Methyl	Iso Amy	l Ketor	n) or N	IIBK	(Met	chyl	Is	э Ві	ıtyl
residue). E	Both mate	erials	demonst	rated t	he char	acteri	stic	s o	f igi	nita	abi:	lity
(D001).		· · · · · · · · · · · · · · · · · · ·										
Surface des										in	teg	rity,
The tanks s	sat on a	concre	te base	behind	6" cur	bs.			·			
		<u></u>										
; .4			-									

Facility:	Monsanto	o-Krummı	cich_		Date:						9/	16/92
Inspector:					Photo	Taken:	Y	N	to	N	S E	W
Unit Name: _	Paint Sl	nop Drum	n Accum	ulation	Area							
LDF Unit: Y	or	n T	ype of	Unit:	Drum S	Storage	Are	ea	. 			_
Location (ide	entify d	leparmte	nt and	orienta	ation o	f unit):	The	Pai	nt	Sho	<u>p</u>
was located	at 3rd a	and E St	reet (northea	st cor	ner).						
Unit characte how waste is	ristics initiat	(const	ruction unit)	n, capac : The p	ity, s	i ze, ag nop dru	e, d m st	l ate cora	s of ge a	op	era	s a
small pad th	at held	a maxir	num of	10 drum	s. The	employ	ees	at	this	fa	acil	ity
would empty	waste s	olvents	into d	lrums lo	cated	in this	are	ea.	The	so.	lven	t and
paint waste	was eitl	ner inc	inerate	d or re	claime	d. The	pair	nt s	hop	was	s di	s
mantled in t	he mid	1980's.			_,							
Wastes Manage Waste Code, passociated w	physical	l state	[solid	, liqui	i, slud	lge, et						rdous
Surface desc secondary co	ntainme	nt descr	ription	, integ	rity, a	ige, to				ir	nteg	rity,
Asphalt pad	- no bu	rm or se	econdar	y conta	ınment	•						
												

Facility:	Monsanto-	Krummrich		Date:		· · · · · · · · · · · · · · · · · · ·			9/3/	192
Inspector:				Photo	Taken:	Y N	to	n s	E W	
Unit Name:	Lab. Drum	Accumulati	on Area							
LDF Unit: Y	or N	Type of	Unit:	Sate]	liteaco	cumula	tion a	rea	for I	lab.
Location (id	entify dep	parmtent and	orient	ation (of unit)	: No	rth o	f t	he ma	ınu-
facturing a	rea at the	rear of th	e lab.							_
Unit charact how waste is	eristics (constructio i into unit)	n, capac : The a	city, s	ize, ag ation a	e, dat rea is	es of a rai	ope sed	rati load	on,
dock that c	onstructed	of concret	e. It i	s an e	nclosed	cage	with .	a ro	oof.	The
area serves	as an acc	umulation a	rea for	waste	that is	trans	ferre	d to	o BBU	J
within 3 day	ys and als	o as a sate	llite a	cea whe	ere wast	e solv	ent i	s s	tored	<u>1</u>
for a longer	r period o	f time.								
Wastes Manag Waste Code, include conf	physical s	state [solid	l, liqui	d, slu	dge, et	c.]):	Waste	sto	red h	nere
Surface des								int	egri	ty,
The area is	an enclos	ed (cage) c	oncrete	loadir	ng dock	with a	roof	•	The	_
dock is not	burmed.	· · · · · · · · · · · · · · · · · · ·			·					
		- <u></u>					·			
, ·										
		-								

Facility: Monsanto-Krummrich	Date: 9/10/92
Inspector:	Photo Taken: Y N to NSEW
Unit Name: Warehouse/Shipping Drum	Storage Area
LDF Unit: Y or N Type of Uni	t: Warehouse
Location (identify deparatent and ori	entation of unit): This area is located
in the southwest corner of BBW wareho	ouse.
Unit characteristics (construction, can how waste is initiated into unit): The	apacity, size, age, dates of operation, he area is an enclosed (caged) area
measuring 20' X 20' in a warehouse th	hat holds product for shipment. At
ready for shipment. Wastes Managed (process description, or	storage area is a totally enclosed is practice of storing a waste in
was 4-NDPA residue, a viscous liquid	that turns solid. The waste was stored
in 20 gallon fiber drums. 4-NDPA is	non-hazardous.
Surface description (concrete, asphasecondary containment description, in The warehouse is totally enclosed. The waste was stored is caged and has a	he area in the warehouse where the

Facility:	Date:
Monsanto-Krummrich	9/8/92
Inspector:	Photo Taken: Y N to NSEW
Unit Name: BBU Waste Warehouse	
LDF Unit: Y or N Type of Unit:	1
	Waste Storage Warehouse (790 day)
Location (identify department and orien	The warehouse is
located in the southwest corner of the	plant.
Unit characteristics (construction, cap how waste is initiated into unit): The 1984. The warehouse is 50' x 100' and	BBU waste warehouse was opened in
secondary containment. Secondary cont	
dike that surrounds the storage area.	The floor of the warehouse is a 6"
concrete slab floor. The warehouse is gallons of RCRA waste (see 1984 Part A	permitted to store 400,000
plant personnel from the various opera	ting departments waste accumulation
pant parametral and various spara	
areas.	
Wastes Managed (process description, co Waste Code, physical state [solid, liqu stored at BBU see attached.	ommercial chemical name, EPA Hazardous uid, sludge, etc.]): For list of waste
Surface description (concrete, asphal secondary containment description, int	
The warehouse is an enclosed concrete	pad measuring 50' x 100'. The pad
has secondary containment.	
; à	

Facility: Monsanto - Krummrich	Date:			8/5-	-6-92	
Inspector:	Photo	Taken:	Y	N to	и в	E W
Unit Name: Ketone Residue Tank						
LDF Unit: Y or N Type of Unit:	Tank 5	595 (13,	000	gallo	n)	/
Location (identify department and orients	ation o	f unit)	: _1	he ta	nk is	
located in Department 277 and is located	in the	southe	east	corne	r of	
dike.						<u> </u>
Unit characteristics (construction, capac how waste is initiated into unit): The K	sity, si letone F	ize, age Residue	, da Tank	tes of	open is a	ration,
year old, 13,000 gallon carbon steel ves	sel. T	The roof	of	this	verti	cal
is a conical weak seam cover constructed	of car	cbon ste	eel.	The	exist	ing
shell thickness is reported to be 0.275	inches	. The	organ	nic se	parat	or,
vacuum cut line, steam out condensate ta	ink, vac	cuum cut	rec	ceiver	, and	the
CONTINUED ON PAGE 3						
Wastes Managed (process description, commusate Code, physical state [solid, liquing Residue tank is located in Department 27	d, slud	lg e , etc	:.]):	The	Keton	ie
a rubber chemical additive known as Sant						
Ketone residue is as follows: CONTINUED			<u> </u>			
Surface description (concrete, asphalt, secondary containment description, integral	, etc.,	age,			int	egrity,
Tank #595 sets behind a 3 1/2' concrete	dike wa	all tha	t has	s been	reir	forced
with rebar. The floor of the dike is als	so made	of reb	ar re	einfor	ced	
concrete. The dike wall and floor as well	ll as th	he tank	pad	has b	een s	sealed.

CONTINUED FROM PAGE 1

Unit characteristics (Continued):

second cut receiver all feed the Ketone Residue tank through three pipelines.

Wastes managed (Continued):

Methyl Iso Butyl Ketone	34.33%
Methyl Iso Butyl Carbinol	27.88%
Methyl Iso Amyl Ketone	3.26%
Methyl Iso Amyl Carbinol	1.21%
Xylene	6.11%
Chlorotoluene	4.36%
Aniline	7.47%
Santoflex 13	.14%
Unknown	.44%

The ketone residue, which is a liquid, carries the following waste codes: D001, D035, and U159.

Facility: Monsanto-Krummrich Date: 9-1	.4-92
Inspector: Photo Taken: Y N to N S E V	ī
Unit Name: Methyl Iso Butyl Ketone Residue Tanks #232, 268 and 271	-
LDF Unit: Y or N Type of Unit: Waste Storage Tanks	-
Location (identify department and orientation of unit): The Methyl Iso	2
Butyl Ketone tanks were located in Department 247.	
Unit characteristics (construction, capacity, size, age, dates of operathow waste is initiated into unit): MIBK residue tanks. Item $\#232$, 268 and 2015	ion,
271, were constructed of carbon steel and had capacities of 3,000, 2250)
and 3,000 gallons respectively. The residue stored in these tanks was	<u>the</u>
result of the recovery of ketone reactants. Closure certification was	
mailed to the agency in February 1989. The tanks received closure in 19	990.
Wastes Managed (process description, commercial chemical name, EPA Hazar	dous
Waste Code, physical state [solid, liquid, sludge, etc.]): The residue	
composed of either MIAK (Methyl Iso Amyl Keton) or MIBK (Methyl Iso Bu	tyl
residue). Both materials demonstrated the characteristics of ignitabil	ity
(D001).	
Surface description (concrete, asphalt, etc., age, structural integrees secondary containment description, integrity, age, topography):	ity,
The tanks sat on a concrete base behind 6" curbs.	
	····

Facility:	Monsant	o-Kru	nmric	h			Date	e:		<u>.</u>			,.			9-14-92
Inspector:							Pho	to T	ake	n:	Y	N	to	N	s	E W
Unit Name:	Methyl	Iso E	Butyl	Keto	ne	Res	idue	Tan.	ks	#23	2,	268	and	27	1	
LDF Unit:	Y or	N	Тур	e of	Un:	it:	Was	ste	Sto	rag	e T	ank	s			-
Location (i	dentify	depar	mtent	and	or	ient	atio:	n of	un	it)	:	The	e Me	thy	1	Iso
Butyl Ketor	ne tanks	were	locat	ed i	n [Depa	rtmer	nt 2	47.	-	_					
Unit charachow waste i	teristic s initia	s (con ted i	nstruc nto u	tion	i, c	capa MIBK	res	, si	ze, ta	age nks	e, (d at e tem	s of #23	or 2,	26	ation, 8 and
271, were	construc	ted of	f cark	on s	stee	el a	nd ha	ad c	apa	cit	ies	of	3,0	00,	2	250
and 3,000	gallons	respec	ctive	у. Т	he	res	idue	sto	red	in	th	ese	tan	ks	wa	s the
result of	the reco	very o	of ket	one	rea	acta	nts.	Clo	sur	e c	ert	ifi.	cati	on	wa	s
mailed to	the agen	cv in	Febru	ıary	198	89.	The	tank	s r	ece	ive	d c	losu	re	in	1990.
															_	
Wastes Mana Waste Code,	ged (pro physica	cess o	descr:	iptic olid	on,	com	merc: id, s	ial ludo	ch e ge,	mic eto	al :.]	name	e, El The	PA :	Ha:	ue was
composed o																
residue).	Both mat	erial	s demo	onsti	rat	ed t	he c	hara	cte	ris	tic	cs c	f iq	mit	tak	oility
(D001).			-													
Surface de secondary of The tanks	containme	ent de	scrip	tion	, i	nte	grity	7, a	ge,	to					nt	e grity,
THE CARRS	sac on a	Conc	rere .	uase	_be	11.1110	. 0	Curr	<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>		_					
								_	,							
																
<u> </u>																

Facility:	Monsar	to-Kru	ummrich		Date:				9/3	/92		
Inspector:		···-			Photo	Taken:	Y	N	to	N	S E	W
Unit Name:	Chlore	/Alkal	li Waste S	Storage	Pad	·-·						
LDF Unit:	or or	N	Type of	Unit:	Waste	Pile/F	ad					
Location (id	lentify the eas	depar stern e	mtent and edge of th	orient ne plan	ation o	of unit):	The	e pa	d w	as	
Unit charact	eristi s initi	cs (co ated i	nstruction	n, capa : The	city, s	s ize, a g Ikali w	e, d	iate e pa	es of	f o p	p era load	tion,
ramp was di	smantle	ed in 1	1989-90.	The pa	d and r	amp was	co	nst	cuct	ed	of	
concrete an	d rebar	const	truction.	There	was no	second	lary	coi	ntai	nme	nt.	
						·						
	-											
												
Wastes Manag Waste Code,												
was stored	on the	pad wa	as associa	ated wi	th the	product	ion	of	chl	ori	ne.	
The waste w	as a me	ercury	contamina	ated st	udy.							
Surface des										i	nteg	rity,
The pad and	ramp w	as cor	nstructed	of con	crete a	ind reba	r.	The	ere	was	no	
secondary c	ontainm	ent.										
									·			
												

Facility: Monsanto-K	rummrich	_ Date:		9/3/9	92			
Inspector:		Photo	Taken:	Y N	i to	n s	E	W
Unit Name: Department	245 Drum Accumul	ation Ar	ea	·				
LDF Unit: Y or N	Type of Unit	Accumu	lation	Site				
Location (identify de	parmtent and orie	ntation o	of unit)	: Dri	um a	ccum	ula	<u>t</u> ion
site is located on the	southwest side of	the dep	artment.	(Pho	oto wa	s ta	ker	of
tote bin lot, this is	where product is	stored b	efore i	t is	shipp	ed.)		
Unit characteristics how waste is initiate								
is approximately six y department is brought from this site to BBU 3 days. There are other than the same of the same are other than the same are sa	to this site on p ware warehouse. M her areas in the d	allets. Maximum s Mepartmen	The wastorage	ste i time drum	s tra at th s are	nsfe is p sto	rre ad red	d is
However, these drums of								.+
product that is to be	reworked. The ma	ceriai s	corea 1	n cni	s are	<u>a 15</u>	_110	
considered waste.								
Wastes Managed (proce Waste Code, physical								
handled at this site i of Phosphorus Pentasu D002), waste sulfur (I	lfide (P_2S_5) . Wast	tes inclu	ıde: wa	ste P	$^{\circ}_{2}S_{5}$ ([0003,	, U:	189,
and Phosphorus Sulfide	(U189).				·			
Surface description secondary containment							teg	rity,
Pad is constructed of	asphalt/concret.		 .					د سسا لیس
								
								

Facility:	Mon	santo	-Krum	mric	<u>h</u>		<u></u>	Date	:					9/1	.0/9	92	
Inspector:	:							Phot	0	Taken:	Y	N	to	N	s	E	W
Unit Name:	: F <u>ac</u>	ility	Land	fill	Nor	thwes	st A	rea									
LDF Unit:	Y	or	N	Ту	pe o	of Uni	it:	Suspe	ct	ed Land	fil	.1					_
Location ((ider	ntify	depar	mten	ıt an	nd ori	ient	ation	c	of unit): T	his	lan	ıdfi	11		_
h <u>as been re</u>	port	ed to	be i	n th	e no	rthwe	est	corne	<u>r</u> _	of the	fac	ili	ty.				
Unit chara	icter	istic	s (co	nstr nto	ucti unit	on, c	a pa the	city, init	s ia	ize, a g	e, ngs	date for	es of	f or	p er	at A	ion,
and Eckhard	lt st	udy,	WGK r	epor	ted	that	the	re wa	s	a 705'	x 3	300'	foc	ot]	Lan	d-	
fill in the were based	e nor	thwes	st cor	ner	of t	the fa	acil	ity	αA	parent.	ly t	thes	e fi	Lnaı	ıng	S	
files that	disc	counts	: the	pres	ence	of t	chis	part	ic	cular fo	ill.	. I	ıke	the	9		
agency. we that sugges	st th	ie pre	sence	of	the	fill.	. н	oweve:	r,	the g	rour	ndwa	ter	and	i s	οi	1
boring stud	ly sh	lows r	no evi	denc	e of	afi	<u>ill.</u>										
			 .														
Wastes Mar Waste Code																ar	dous
												_	··				
Surface d	escr con	iptio	n (cc ent de	oncre	ete, iptic	asph on, i	alt	, etc rity,	.,	age, age, to	stı pog	ruct	ural	i	nte	egr	ity,
						 											

W. L. Smull (2322)

AME-LOCATION-PHONE

DATE

ROM

April 1, 1986

cc. J. W. Molloy

G. L. Jones

SUBJECT

WGK-RCRA

REFERENCE

TO

M. R. Foresman - B3NA

R. L. Biggerstaff - CS7J

P. J. Haechrel

When the WGK filings for the RCRA Part A and Eckhardt study were made the area in the west portion of the main plantsite occupied by the contractors parking lot was noted as an old landfill based on heresay evidence. This area was subsequently picked up and included on the Sauget sites study by IEPA.

The G and M literature search conducted as part of our groundwater study failed to uncover any evidence supporting the existence of this site and likewise our field studies which included corings.

As a result, G and M has prepared the attached letter which we propose to use for amending our RCRA-A and -B filings to delete this site. Your comments on the letter and the approach in general are requested.

Also attached is the groundwater and soils data for the area.

Warren L. Smull

/db

Attachment

DRAFT

DRAFT

Project No.: N0308SG3 March 24, 1986

VIA FEDERAL EXPRESS

Mr. Warren Smull Monsanto Industrial Chemical Company W.G. Krummrich Plant Monsanto Avenue Sauget, Illinois 62201

Dear Mr. Smull:

We have completed our investigations in the contractor's parking lot at the W.G. Krummrich plant in Sauget, Illinois. This area was listed on the Krummrich plant's Eckhardt submission as a landfill used between 1950 and 1957.

Our thorough search through Monsanto's records produced no evidence that the area had ever been used as a landfill. The three borings that were made by Geraghty & Miller also support the fact that landfilling did not occur in the area. Although the geologic logs of the borings and subsequent chemical analyses of soils samples show some evidence of soils contamination, the material in the area appears to be natural. There is a layer of fill but this is a surface layer evidently laid down as part of the construction for the parking lot.

DRAFT

Analyses of ground-water samples collected from a shallow well downgradient of the area do not indicate a large upgradient source of contaminants and support the conclusion based on the logs and soil samples. Except for methylene chloride which was found at 9 and 38 ug/L on two occassions, the concentrations of all other organic compounds are less than 10 ug/L.

If you have any questions or if you need additional information please do not hesitate to contact us.

Very truly yours,
GERAGHTY & MILLER, INC.

Nicholas Valkenburg Associate

NV:dv

Table 1 Summary of USEPA Priority Pollutant Volatile Organic Compounds in Ground Water and Soil, Monsanto Company, W.G. Krummrich Plant, Sauget, Illinois

Parameter	GM-4A ⁴ 11-83	a) 5-84	8G-14 ^{b)} 8.5-10 Feet 8-84	
Acrolein	<1	<1	<1	
Acrylanitrile	⟨1	₹1	₹1 .	
Benzene	<1	<1	650	
bis (Chloromethyl) ether	<1	<1	<1	
Bromoform	<1	<1	<1	
Carbon Tetrachloride	< <u>1</u>	<1 ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	<1	
Chlorobenzene	<1	<1	<1	
Chlorodibromomethane	<1	<1	<1	
Chloroethane	<1 .	<1	<1	
2-Chloroethylvinyl ether	<1	<1	<1	
Chloroform	<1	<1	<1	
Dichlorobromomethane	<1	<1	<1	
Dichlorofluoromethane	<1	<1	<1	•
1,1 - Dichloroethane	<1	<1	<1	
1,2 - Dichloroethane	<1	<1	<1	
l,l - Dichloroethylene	<1	<1	<1	
1,2 - Dichloropropane	<1	<1	<1	
cis - 1,3 - Dichloropropylene	<1	<1	<1	
trans - 1,3 - Dichloropropylene	<1	<1	<1	
Ethylbenzene	<1	<1	<1	
Methyl bromide	<1	<1	<1	
Methyl chloride	<1	<1	<1	
Methylene chloride	9	38	20,000	
1,1,2,2 - Tetrachloroethene	<1	<1	<1	
Tetrachloroethylene	<1	<1	<1	•
Toluene	<1	2	7,200	
1,2 - Trans-dichloroethylene	<1	<1	<1	
1,1,1 - Trichloroethane	<1	<1	<1	
1,1,2 - Trichloroethane	<1	<1	<1	
Trichlorofluoromethane	<1	<1	<1	
Vinyl Chloride	<1	<1	<1	

a) Results are in ug/L b) Results are in ug/g

Summary of USEPA Priority Pollutant Extractable Compounds in Ground Water and Soil, Monsanto Company, W.G. Krummrich Plant, Sauget, Illinois.

	8G-14 ^{b)}								
	GM-4A	8	.5-10 Feet						
Parameter	11-83	5-84	8-84						
2 - Chlorophenol	<1	<1	<1						
2,4 - Dichlorophenol	<1	<1	<1						
2,4 - Dimethylphenol	<1	<1	<1						
4,6 - Dinitro-o-cresol	<1	<1	<1						
2,4 - Dinitrophenol	<1	<1	<1						
2 - Nitrophenol	<1	<1	<1						
4 - Nitrophenol	<1	<1	<1						
p - Chloro-m-cresol	<1	<1	<1						
Pentochlorophenol	<1	<1	<1						
Phenol	<1	<1	<1						
2,4,6 - Trichlorophenol									

a) Results are in ug/L Results are in ug/g

Table 3 Summary of USEPA Priority Pollutant Base/Neutral Extractable Compounds in Ground Water and Soil, Monsanto Company, W.G. Krummrich Plant, Sauget, Illinois.

	GM-4A	a)	8G-14 ^{b)} 8.5-10 Feet
neter	11-83	5-84	8-84
cenaphthene	<1	<1	<1
cenapthylene	<1	<1	<1
nthracene	<1	<1	<1
enzidine	<1	<1	<1
enzo(a)anthracene	<1	<1	<1
enzo(a)pyrene	<1	<1	<1
enzo(b)fluoroanthene	<1	<1	<ί
enzo(ghi)perylene	<1	⟨1	<1
enzo(k)fluoranthene	<1	<1	<1
is (2 - Chloroethoxy) methane	<1	<1	<1
	<1	<1	<1
is (2 - Chloroethyl) ether is (2 - Chloroisoprophy) ether	<1	<1	<1
	<1	2	392
is (2 - Ethylhexyl) phthalate		<1	
- Bromophenyl phenyl ether	<1	<1	<1
utyl benzyl phthalate	<1	<1	<1
- Chloronaphthalene	<1		<1
- Chlorophenyl phenyl ether	<1	<1	<1
nrysene	<1	<1	<1
ibenzo (a, L) anthracene	<1	<1	<1
,2 - Dichlorobenzene	<1	<1	<1
,3 - Dichlorobenzene	<1	<1	<1
,4 - Dichlorobenzene	<1	<1	<1
,3' - Dichlorobenzidine	<7	<1	<1
iethyl phthalate	<1	1	<1
imethyl phthalate	<1	<1	<1
i-n-butyl phthalate	2	3	206
,4 - dinitrotoluene	<1	<1	<1
,6 - dinitrotoluene	<1	<1	<1
i-n-octyl - phthalate	<1	<1	<1
,2 Diphenylhydrazine	<1	<1	<1
luoranthene	<1	<1	<1
luorene	<1	<1	43 .
ex achlorobenzene	<1	<1	<1
exachlorobutadiene	<1	<1	<1
exachlorocyclopentadiene	<1	<1	<1
exachloroethane	<1	<1	<1
aphthalene	<1	<1	<1
itrobenzene	<1	<1	<1
-Nitrosodimethylamine	<1	<1	<1
-Nitrosodi-n-propylamine	<1	<1	<1
-Nitrosodiphenylamine ·	<1	<1	<1
henanthrene	<1	<1	479
yrene	<1	<1	<1
,2,4 - Trichlorobenzene	<1	<1	<1

a)
Results are in ug/L
Results are un ug/g

50

Summary of USEPA Priority Pollutant Compounds in ground Water and Soil, Monsanto Company, W.G. Krumrich Plant, Sauget, Illinois

Parameter	GM-4A ^a 11-83) 5-84	8G-14 ^{b)} 8.5-10 Feet 8-84	
Aldrin	<1	<1	<0.4	
Alpha - 8HC	<1	<1	<0.2	
Beta - BHC	<1	₹1	<0.5	
Gamma - BHC	<1	<1	<0.3	
Delta - BHC	<1	<1	<0.4	
Chlordane	<1	<1	<6.1	
4.4' - DDT	<1	<1	<9.6	
4,4' - DDE	<1	<1	<0.07	
4,4' - DDD	<1	<1	<0.07	
Dieldrin	<1	<1	<0.007	
Endosulfan I	<1	<1	<440	
Endosulfan II	<1	<1	<0.011	
Endosulfan Sulfate	<1	<1	<0.042	
Endrin	<1	<1	<0.020	
Endrin Aldeluide	<1	<1	<0.022	
Heptachlor	<1	<1	<0.4	
Heptachlor epoxide	· <1	<1	<0.5	
PCB - 1016	<1	<1	<3.4	
PCB - 1221	<1	<1	<13.3	
PCB - 1232	<1	<1	<6.2	
PCB - 1242	<1	<1	<8.2	
PCB - 1248	<1	<1	<8.6	
PCB - 1254	<1	<1	<12.3	
PCB - 1260	<1	<1	<17.4	
Toxaphene	<1	<1	<69.4	

a)
Besults are in ug/L
Results are in ug/g

Summary of USEPA Priority Pollutant Metals and Miscellaneous Parameters in Well GM-4A, Monsanto Company, W.G. Krummrich Plant, Sauget, Illinois (concentrations are in ug/L except where noted).

Parameter	11-83 USEPA Priority	2-84 Pollutant	5-84 Metals
Antimony Arsenic Beryllium Cadmium Chromium Copper Lead Mercury Nickel Selenium Silver Thallium Zinc	0.014 <0.002 0.017 <0.01 <0.04 NA <01001 <0.0002 <0.04 <0.002 <0.001 0.003 0.014	0) NA a a a a a a a a a a a a a a a a a a a	<0.5 <0.01 <0.02 <0.05 NA <0.01 <0.005 <0.05 <0.05 <0.05 <0.05 <0.01 <0.05 <0.01
	Miscellaneous	Parameters	
pH (units) Specific Conductance (umhos/cm)	7.8 1,050	7.6 850	7.1 1,050
Temperature (°C)	12	14	14
TOC Total Phenols (ug/L) TOX (ug/L)	42 0.004 17	12 <0.002 19	6 0.003 7
Chloride Cyanide	NA <0,005	45 NA	76 <0.005

a) Not analyzed

Facility:	Monsanto	o-Krum	mrich		Date:		9/14/92						
Inspector:					Photo	Taken:	Y	N	to	N	S E	w	
Unit Name:	Facility	y Land	fill - C	entral	Area	(suspect	ed)						
LDF Unit: 3	or or	N	Type of	Unit:	Land	fill							
Location (id	lentify d	leparmt	ent and	orient	ation	of unit):	Thi	s sı	ıspe	cte	d	
landfill is	alleged	to be	in the	area o	f the	Chlorobe	nzer	ne d	lepai	ctme	int.		
							 .						
Unit charact	eristics initiat	(cons	truction to unit)	n, capa : This	city, suspe	s ize, ag cted lan	e, dfi.	late	s of	op cepc	era	tion,	
in earlier	Part a f	ilings	based c	n here	say ev	idence.	No	rec	ords	s co	uld	be	
found in WG	K's files	s that	showed	a land:	fill i	n this a	rea	. E	ecai	ıse	no		
documentati	on or ev	idence	could b	e found	d subs	tantiati	ng t	his	lar	ndfi	11,		
it was remo	ved from	Krumm	rich 12/	8/86 Pa	art A	submitta	1.						
Wastes Manag Waste Code,													
Surface des										ir	iteg	rity,	

ATTACHMENT 1

LANDFILLS

The W. G. Krummrich Plant does not operate a landfill at the present time. Four separate landfills have been used in the past. These are listed below along with a description and location of each. This information is based on available drawings and documentation.

1) Old Dump - Located at the site of existing plant storeroom and the adjacent area. 1942 plant drawing shows that this landfill was closed and filled-in by that date. Approximate size of the landfill is 150' X 175'. The landfill was used primarily as a disposal site for Nitrochlorobenzene waste.

During a sewer construction project, some waste drums were uncovered in this landfill area. They were found to contain 2-Nitrobiphenyl and 4-Nitrobiphenyl. All unearthed drums were removed from the project area and will be incinerated at an approved disposal site.

- 2) New Dump This closed landfill is located at the site of Bldg. BBK in the southwestern portion of the plant. This landfill is approximately 75' X 100' and had been in operation at least through the years of 1942 to 1951.
- 3) Phenol Residue Dump This closed landfill is located on the western side of the plant approximately 400 ft. due north of the (2) above-mentioned landfills. The landfill encompasses an area of 75' X 100' and primarily contains residue from the now-extinct Phenol Department. The landfill was in operation in 1942 and the best available data indicates that it was closed before 1951.
- 4) Lot F Landfill This landfill is located on W. G. Krummrich Plant property west of State Route 3. A 1946 drawing indicates that a landfill approximately 42' X 248' with a maximum depth of 18 ft. contains 5260 drums from the Nitrochlorobenzene Dept. Alleged contents of the drums include Orthonitrochlorobenzene and Dinitrochlorobenzene waste residue and drainings. Preliminary sampling of drums in the landfill indicate that some contain 2-Nitrobiphenyl and 4-Nitrobiphenyl.

In addition to the above, it is suspected that some undocumented landfill activity occurred near the site of the BBU Warehouse (RCRA waste container storage area). Two abandoned tanks containing solid hazardous constituents were unearthed in this area during the excavation for a plant project.

The items listed above are based on the best information available to date. This document supercedes all previous submittals and this information indicates the nonexistence of some landfills listed on the Part A document. No evidence or documentation to date has substantiated the existence of those landfills.

Facility:				Date:					
-	Monsanto-	Krummrich						9/8	•
Inspector:				Photo	Taken:	A N	to	NSEW	7
Unit Name:	BBU Waste	. Warehouse			· · · · · · · · · · · · · · · · · · ·				-
LDF Unit: Y		Type of	f Unit:	Magt 6	Stores	. Wax	ah awa	7788-3	5
Location (id	entify dep	parmtent and			-):		e (790 d ehouse	• •
located in t	he southw	est corner	of the pl	ant.					
Unit charact how waste is 1984. The	initiate	(construction d into unit is 50' x 10): The BE	3U was	ste ware	nouse	was o	pened i	ion,
secondary codike that succentrate sla	arrounds to floor.	the storage The wareho	area. Thouse is pe	e flo	or of t	he wa	rehou:	se is a	6"
gallons of l	nel from	the various	operation	wast ig der	e is ci	anspo s was	te ac	cumulati	ion
									
areas.									
Wastes Manag Waste Code,	ed (proce physical	ss descript: state [soli	ion, commo d, liquid	ercia l, slu	l ch e mio	cal na	me, El	PA Hazar List of v	dous
stored at B	3U see att	cached.				-			
									
Surface des								integr	rity,
The warehou	se is an e	enclosed com	ncrete pa	d mea	suring	50' x	100'.	The pa	ad
has seconda	ry contai	nment.							
	_								
-		-4							

Facility:	Monsant	o-Krum	mrich		Date:							9	-14-92
Inspector:					Photo	Take	n:	Y	N	to	N	SI	e w
Unit Name:	Methyl	Iso Bu	tyl Ket	one Res	idue Ta	anks	#232	2, 2	268	and	27	1	
LDF Unit: Y	or	N	Type of	Unit:	Waste	e Sto	rage	e Ta	nks	<u>. </u>			
Location (id	entify o	deparmi	tent and	orient	ation	of un	nit)	: .	The	e Me	thy	1 1	so
Butyl Keton	e tanks	were l	ocated	in Depa	rtment	247.						-	
													
Unit charact	eristics initia	s (cons ted in	structio to unit)	n, capa : MIBK	city, s residu	size, ue ta	age nks	, d	ate tem	s of #23	o <u>r</u>	268	ation, and
271, were c	onstruct	ed of	carbon	steel a	nd had	capa	cit	ies	of	3,0	00,	2:	250
and 3,000 g	allons r	espect	ively.	The res	idue s	tored	lin	the	ese	tan	ks	was	s the_
result of t	he recov	very of	ketone	reacta	nts. C	losur	e c	ert:	ific	cati	on	was	3
mailed to t	he agend	y in E	February	1989.	The tai	nks r	ece	ive	d c	losu	re	in	1990.
Wastes Manag	physica	l stat	e [solid	i, liqu	id, slu	idge,	etc	:.])	: _	The	res	sid	ue was
composed of						_							
residue). B	oth mate	erials	demonst	rated t	he cha	racte	eris	tic	s o	f ig	ni	tab	ility
(D001).													
Surface des secondary c	ontainme	nt des	criptio	n, inte	grity,	age,	e, top	str	uct	ural	i	nte	egrity,
													
-													

Facility:	Monsar	to-Kr	ummrich	·	Date:	9/11/92								
Inspector:					Photo	Taken:	Y	N	to	N S	S E	W		
Unit Name:	"Old E	ump"	(or Site #2	1)								_		
LDF Unit: Y	or	N	Type of	Unit:	Facil	ity lan	dfi	11						
Location (id	entify	depar	emtent and	orienta	tion	of unit)	:	Th:	is a	rea	is			
located on	the sou	theas	t corner of	f BBW a	nd ext	ends ac	ros	s 5t	ch S	tree	et :	in		
the southwes	st area	of t	he plant.											
Unit charact how waste is	eristic initia	cs (co	onstruction, into unit):	, capac The 1	ity, s andfil	ize, ago	e, d	late xima	s of	ор (У	era	tion,		
150' x 175'	. A 194	2 pla	nt map ind	icates	that t	his fil	l w	as (clos	ed a	and			
filled in by	y that	year.	The "old	dump"	was pr	imarily	us	ed 1	for	the				
disposal of	Nitroc	hlore	benzene was	ste. A	storer	oom and	pa	rt o	of t	he A	ACL			
unit were bu	uilt or	top	of the fil	1.										
			•											
Wastes Manag Waste Code, waste, such	physic	al st	ate [solid,	liquid	l, slu	dge, etc	=.])	: <u>N</u>	litro	chlc	rob	rdous enzene		
construction	n in th	nat ar	ea.											
	···													
Surface desc secondary co										in	teg	rity,		
								·						
			·											
			~ ~ *											

Facility:		Date:		9	/11/	92						
Inspector:			····		Photo	Taken:	Y	N	to	N	S E	W
Unit Name:	Faci:	lity La	ndfill-Bui	lding	BBK ("N	lew Dump	")					<u> </u>
LDF Unit:	c or	N	Type of	Unit:	Landf	ill		<u></u>				_
Location (id	lentif	y depar	mtent and	orient	ation	of unit	:	Thi	is l	andi	<u> </u>	_is
located at	the so	outhwes	t corner c	of Buil	ding BE	K (ACL	Dep	artm	nent) .		
			· · · · · · · · · · · · · · · · · · ·									
Unit charact how waste is	erist s init	ics (co iated i	nstruction .nto unit)	n, capa : This	city, s landfi	ize, ag	e, (late x 10	s of	op and	era was	tion,
in operatio	n bet	ween the	e years of	1942	and 195	1.						
											<u>.</u>	
									_			
				-					, , , , , , , , , , , , , , , , , , , 			
			·		· · · · · · · · · · · · · · · · · · ·							
Wastes Manag Waste Code,	ged (p physi	rocess .cal sta	descriptionte	on, com , liqui	mercial d, slu	chemic dge, et	al :	name	e, El le ha	PA H	laza 10 r	rdous ecords
indicating	what v	waste w	as placed	in thi	s fill.							
_												
Surface des										ir	ıteg	rity,
		<u>-</u>										
			·	· _ · · · · · · · · · · · · · · · · · ·					 			
			· · · · · · · · · · · · · · · · · · ·									
. •			***									

Facility:	Monsar	to-Kru	ummrich		Date:9							
Inspector:					Photo	Taken:	Y	N	to	n s	E	W
Unit Name:	Phenol	Resid	due Site									
LDF Unit: Y	or	N	Type of	Unit:	Landi	fill		,				
Location (id	lentify	depar	mtent and	orient	ation o	of unit)	:	The	e ph	enol	re	sidu
site is loc	ated ir	the w	vest cent	ral are	a of th	ne plant	, n	ear	3rd	and	Н	
Streets.	·· ·								···			
Unit charact	eristic	cs (con ated i	nstructio nto unit)	n, capac : The	city, s	i ze, ag residue	e, d	late te 1	s of	ope ures	rat	ion,
75' x 100'	and was	close	ed before	1951.	This s	site hol	ds	was	tes	,		
associated	with th	e prod	duciton o	f pheno	l. Manu	ıfacturi	ng	uni	ts a	nd r	oad	s
are constru	cted or	top o	of this s	ite.								
						··						
Wastes Manag Waste Code,	ged (pro	ocess d al sta	lescripti te [solid	on, com l, liqui	mercia] .d, slu	chemic dge, etc	al :	name	The	PA Ha	zar es	dous
this site w	as asso	ciated	with th	e produ	ction o	of pheno	1.					
												_
Surface des										int	egi	ity,
												,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
					<u> </u>						<u>.</u>	

Facility:	Monsar	to-Kru	mmrich		Date:							
Inspector:					Photo	Taken:	Y	N	to	N	S E	W
Unit Name:	Route	3 Drum	site		 -							_
LDF Unit: Y	or or	N	Type of	Unit:	Landf	ill						
Location (id	lentify	deparm	atent and	orient	ation o	of unit)	:	This	s si	te	is	_
located in	Lot F,	which	is west o	f the m	anufac	turing a	area	acı	ross	Ro	oute	3 i
the southwe	st corr	er.										
Unit charact	eristi initi	cs (con ated in	struction nto unit)	t, capac The R	sity, s	ize, ag	e, d ite	ates is a	s of	op ox:	era	tion,
42' x 248'	and has	a dep	th of 18'	. The	fill c	ontaine	d ap	pro	xima	te:	ly	
5200 drums	of wast	e from	the Nitr	ochloro	benzen	e depar	tmen	t.	Som	e (of t	he
drums have	been re	moved	and the a	rea has	been	capped.						
Wastes Manag Waste Code, include Ort	physic	al stat	te [solid	, liqui	d, slu	dge, etc	:.])	: <u>Tl</u>	he w	ast	te m	ay
and 4-Nitro	bipheny	'l (see	attached	for ad	dition	al anal	ytic	al :	info	rma	atic	n).
Surface des secondary co	criptic	on (con ent de	ncrete, a scription	sphalt,	etc.,	age, age, top	stru	ıctu	ral	ir	nteg	rity

Facility:	Monsanto-Krui	mmrich	_ Date: _		9	/14/	92			
Inspector:			Photo Tal	cen:	Y	N	to	N	S E	w
Unit Name:	Suspected lar	ndfill								
LDF Unit: Y	or N	Type of Unit	: Landfill							
Location (id	lentify deparm	tent and orie	ntation of	unit):	Thi	s s	ite	is	
located a fe	ew yards north	h of BBU wareh	ouse and ju	st s	out	n of	the	e "	Big	
Mo" benzene	storage tank	•								
Unit charact	eristics (con s initiated in	struction, cap nto unit): Two	pacity, size	, ag tank	e, d	iate hat	con	or tai	era ned	tion,
solid hazard	dous constitue	ents were four	d in this a	rea	dur	ìng	a c	ons	truc	tion
project. The	his is the on	ly evidence of	any landfi	ll a	cti	vity	, in	th	e aı	cea.
Before BBU	was built, the	e area was occ	asionally u	sed	as .	a co	al:	sto	rage	<u> </u>
area.										
						-				
Waste Code,	physical stat	escription, content in the content i	uid, sludge	, et	c.])	: <u>s</u>	ample	ana	lysi	
chlorophenol (0.56%, Tetrachlo	chlorophenol 2.2 rophenol 9.0%, P he tanks indicat	entachloropher	01 0.	.0069					
Surface des secondary co	cription (con	ncrete, asphal	lt, etc., a egrity, age	ge, , to	str	ruct	ural	i	nteg	rity,

ATTACHMENT 3

Monsanto Company W.G. Krummrich Plant EPA ID: ILD 000802702

While no data exists (with the exception of the unearthed tanks) indicating any prior or current releases of hazardous wastes to the environment (as per our response to Question 3) we wish to advise you that Monsanto has retained Geraghty & Miller, Inc. to study the site's groundwater conditions. The hydrogeologic investigation is underway and is scheduled for completion in 1986. At that time, Monsanto will be in a position to discuss the findings of the study with the E.P.A.

Sample analysis of the contents of the two unearthed tanks showed the following hazardous constituent compositions:

	%
Orthochlorophenol	$\overline{0}.07$
Parachlorophenol	2.29
2-4 Dichlorophenol	0.13
Trichlorophenol	0.56
Tetrachlorophenol	9.05
Pentachlorophenol	0.006

It should be noted that sample analysis of soil from around the tanks did not indicate the presence of any hazardous constituents.

Facility: Monsanto-Krummrich								Date:	_		9,	11/	92			
Inspector:		<u>.</u>			_	Photo	та	ken:	Y	N	to	N	S E	W		
Unit Name:	<u>01d</u>	Dis	scharge	Pond												
LDF Unit:	Y c	r	N	Туре	of	Uni	t:	Surfa	ce	Impo	ındr	nent	·			
Location (ident	.fy	deparm	tent	and	ori	ent	ation	of	unit)	:	Thi	s si	te	is	
located ea	st and	l no	orth of	Depa	rtm	ent_	277			 						
Unit chara	cteris	tic	cs (con	struct	tion	n, ca : <u>Th</u>	apac e "	city, s	siz: sch	e, ag arge	e, o	date	s of	op sure	era s	tion,
125' x 125	' and	was	s used	by th	e S	ulfu	ric	Acid	Dep	artme	ent	fro	m_			
1942 until	1951															
				-		•										
Wastes Man Waste Code																
exists on	the ma	ter	cial di	schar	ged	int	o t	hat ar	ea.							
Surface de secondary														ir	nteg	rity,
																
																
· • ·				 												
: 							·									

Facility:	Monsan		Date:		9	/11,	/92						
Inspector:					Photo	Taken:	Y	N	to	N	S E	W	
Unit Name:	Sulfat	e Pond											
LDF Unit:	Y or	N	Type of	Unit:	Surfa	ce Impo	und	ment	=				
Location (i	dentify	deparm	tent and	orient	ation	of unit)	:	Th	is s	ite	is		
located dir	ectly e	ast of	Departme	ent 277.									
					·					 -			
Unit charachow waste i	teristions	cs (con ated in	structio	n, capa	city, s sulfate	ize, ag	e , (dat e	s of	th	pera	tio	n,
that manufa													
300' x 75'.	The p	ond was	s operati	ional fi	om 194	2 to 19	52.						
										-			
				, <u>, , , , , , , , , , , , , , , , , , </u>					_				
	•												
Wastes Mana Waste Code,	ged (pro	ocess d	escripti	on, com	mercial	l chemic	al :	name	e, El Chis	A po	Haza nd	rdo	us
contained s				-,	,			, , _					
					- ,								_
Surface des	scriptic ontainm	on (cor ent des	ncrete,	asphalt n, integ	, etc. grity,	, age, age, to	str pog:	ruct	ural	i	nte	ŗrit	ty,
		<u> </u>											-
			<u></u>										
	· · · · · · · · · · · · · · · · · · ·	·-· ·- ·-											
			- 1										

Facility:	Monsanto-Krummrich	Date: 9/14/92	
Inspector:		Photo Taken: Y N to N S E	W
Unit Name:	"Old Pond"		_
LDF Unit: 3	or N Type of Unit:	Surface Impoundment	_
Location (id	lentify deparmtent and orient	ation of unit): This site is	
located in	the southwest central area or	the plant directly under	
Building BB	Z (Storeroom).		
Unit charact	eristics (construction, capa s initiated into unit): The	city, size, age, dates of operationit is approximately 375' x 75	tion,
The only re	cords found indicate that the	s fill was closed and filled	
by 1942.			
Waste Code,		mercial chemical name, EPA Haza d, sludge, etc.]): No records in the pond.	rdous
Surface dee	grintion (congrete asphalt	eta ago structural integ	rity
	ontainment description, integ	, etc., age, structural integrity, age, topography):	
	·		
	·		

Facility: Monsanto-Krummrich Date: 9/14/92	_
Inspector: Photo Taken: Y N to N S	E W
Unit Name: Incinerator Site	
LDF Unit: Y or N Type of Unit:	
Location (identify deparmtent and orientation of unit): The incinera	tor
was located at 4th and G Streets.	
Unit characteristics (construction, capacity, size, age, dates of oper how waste is initiated into unit): The incinerator was built in 1971	
and operated until 1977, when it was shutdown and dismantled. A total	
of 151,000 tons of organic waste was incinerated at this unit during	
its operation. At this time, there is no incinerator in operation	
at Krummrich	
Wastes Managed (process description, commercial chemical name, EPA Haz Waste Code, physical state [solid, liquid, sludge, etc.]): The incine	ardous rator
handled the following material: chemical intermediates, halogenated	
aromatics, polychlorinated biphenyls, plasticizers, polar solvent, ar	ıd
halogenated aromatic solvents.	
Surface description (concrete, asphalt, etc., age, structural intesecondary containment description, integrity, age, topography):	grity,
The incinerator sat on a concrete and rebar base.	

Facility:	Facility: Monsanto-Krummrich							Date:			9	/12/	92			_	
Inspector:						·	_	Photo	7	raken:	Y	N	to	N	S F	e v	Ť
Unit Name:	Co	ndens	ate Ta	ank I	tem (612 ((PNA	Sepa	ra	ator T	ank)					_
LDF Unit:	Y	or	N	тур	e of	Unit	t:	Stora	ge	Tank							_
Location (i	iden	tify	depar	mtent	and	orie	enta	tion	01	f unit	:):	Ite	m 61	2 i	.s		-
located in	Dep	artme	nt 222	2 (Pa	ranit	troan	nili	ne).				 -					
						·											
Unit charac	ter	istic	s (com	nstru	stion	n, ca : The	pac	ity, s	si at	. ze, a cten	ge, k i:	date s a	es o 1	or	era all	ıt:	ion,
carbon stee																	
																	
						- 			-								
			·							<u></u>							
								 				·				_	
																	
Wastes Mana Waste Code,																	
the tank ar	e:	Para	nitro	chlor	oben:	zene,	, Pa	ranit	r	oanili	ne	(P07	7),				
Nitrochloro	ben	zene.		··													
Surface de secondary	scr	iptio ainme	n (co ent de	ncret scrip	e, a	spha, in	lt, teg:	etc.	, a	age, ge, to	st: opog	ruct	ural	i	nte	gr	ity,
The condens	ate	tank	is pa	art o	f the	e man	nufa	cturi	no	g unit	an	d is	in	the	ı ur	pgc	er
levels of t	he o	depar	tment.	. How	vever	the	e f	loor c	of.	the d	lepa	rtme	ent i	s c	onc	er	ete,
no burm or	sec	ondar	y con	tainm	ent.												
																	

Facility:	Monsanto Kr	ummrich		Date:					9/16	/92
Inspector:				Photo	Taken:	Y	N to	N	SE	W
Unit Name:	Department	237 Storage	Tank,	Item	210					
LDF Unit: Y	or N	Type of U	nit:	Stora	ge Tank					
Location (id	entify depar	rmtent and o	rienta	tion	of unit)	: _	The ta	ank	sat	near
the corner	of 3rd and F	alling Sprin	ngs Ro	ad sou	th of Bu	ild	ing BI	₹.		
	·									
Unit charact how waste is	eristics (co initiated	onstruction, into unit):	capac This	ity, s tank h	ize, age eld res	e, da idue	ates of from	f o Sai	pera ntop	tion,
Tank #210 w	as a 16,000	gallon stell	l tank	and s	at behir	nd a	conci	cete	e di	ke
and on a con	ncrete pad.	The tank was	put	into s	ervice :	in 1	979 ar	nd s	shut	
down in 198	1. The tank	was dismant]	led in	1982.	<u> </u>					مرسطين مستمير
Wastes Manag Waste Code, residue from	physical st		liquid							
secondary co	ontainment d	oncrete, aspection, base behind	integr	city,	age, top	ogr	ctura aphy):	1 i	inte	grity,
Taine Sac Oil	a concrete	pase pelitila	a 4	COHOLE	ce aike	•				
	 _									
										
		· **								

Facility: _	Monsant	o-Krummr	rich		Date:						9/	10/92
Inspector: _					Photo	Taken	: Y	N	to	N S	E	W
Unit Name: _	Benzyl	Chloride	Residu	e Tank	, Item	189						_
LDF Unit: Y	or	n T	ype of U	nit:	Stora	ige Tai	nk					
Location (ide located in D			nt and o	rienta	ation o	of uni	t):	Tar	nk #1	189	was	_
Unit characte how waste is								_				
(Fiberglass							rely	abot	re gi	roun	id a	nd
diked. The	tank wa	as remove	ed from	servio	e in 1	L982.				· · ·		
Wastes Manage Waste Code, p	ed (prophysica	cess des 1 state	cription [solid,	, comm	ercial d, slu	l chem: dge, e	ical etc.]	name): _	he EF	A Hank	aza:	rdous ored
a waste that	had h	azardous	constit	uents	. The	compo	sitio	on 0:	f th	is k	(015	<u>. </u>
liquid waste	e is as	follows	: 75% B	Benzal	Chlor	ide; 1	5% B	enzy	l Ch	lori	lde;	
10% Highboil	s.											
Surface desc secondary com The tank was	ntainme	nt descr	iption,	integ	rity,	age,	topog	raph	y):			
			47-3									

Facility:	Monsanto-Krummrich	Date:	9/14/92	,	
Inspector:		Photo Taken:	Y N t	ONSET	W
Unit Name:	PCB Warehouse			·	_
LDF Unit: 3	f or N Type of Unit:	Waste Stora	ge Facilit	<u>y</u>	_
Location (id	dentify deparmtent and orien	tation of unit	t): This	site is	_
located in	the central manufacturing ar	rea due west o	f the inci	.nerator	
site.		·			
Unit charact how waste is	ceristics (construction, caps s initiated into unit): This	acity, size, a s was was used	g e, dates from 1979	of operat	ion,
when it was	shutdown and dismantled. Th	ne last shipme	nt of wast	e to this	<u>. </u>
area was mad	de in November 1981. The inv	entory of the	warehouse	for the y	ears
it was in o	peration were as follows: 1	1979 - 361k lb	s.; 1980 -	634 k lb	s.;
1981 - 1063	k lbs. and 1982 - 0				
Wastes Manag Waste Code,	ged (process description, comphysical state [solid, liqu	mmercial chemi nid, sludge, e	cal name, tc.]): PCE	EPA Hazar Wastes	dous
secondary c	cription (concrete, asphalmontainment description, intended of the curb.		opography)		

Facility:	Monsant	to-Kru	mmrich_		Date:9	/14/92							
Inspector:				-	Photo	Taken:	Y	N	to	N	S E	w	
Unit Name:	Chlor/	Alkali	Waste D	etox Un	it								
LDF Unit: Y	or	N	Type of	Unit:	Waste	Water Det	oxif	ica	tion	Uni	t		
Location (id	entify	deparm	ntent and	orient	ation	of unit)	: Th	nis	uni	t w	as		
located in	the Chlo	or/Alk	ali depa	rtment	which w	as in t	he s	sout	hea	ste	rn		_
section of	the plan	nt.											_
Unit charact how waste is	eristic initia	s (con ted in	structio nto unit)	n, capa : <u>This</u>	city, s facili	size, ag ty bega	e, d n or	l ate pera	s of	or ns	pera in	t io 1 1980	1, -
and involve	d the to	reatme	nt of me	rcury c	ell hou	se brin	e so	olic	ls f	or	the		
removal of	leachab.	<u>le mer</u>	cury. T	he majo	r proce	ss feat	ures	s ir	clu	ded	a		
3,000 gallo	n reacto	or and	a 27-3	yard me	tal rol	l off t	reat	cmer	it be	ox.	Th	e	
Chlor/Alkal	i depar	tment	was shut	down an	<u>d disma</u>	intled i	n tl	ne n	nid	198	0's	•	
Wastes Manag Waste Code, brine solid	physica	al stat	te [solid	i, liqu	id, slu								-
Surface des secondary co	criptio:	n (coment des	ncrete,	asphalt	, etc. grity,	, age, age, to	str	uct	ural	i	nte	grit	_ ሃ,

Facility:	Monsa	nto-Kr	ummrich_			Date:			9/9,	92			_	
Inspector:					_	Photo	Taken	. Y	N	to	N	s	e w	
Unit Name:	High	Boiler	Purge Ta	nk,	Item	552								
LDF Unit: Y	or	N	Type o	E Uni	.t:	Waste	e Stora	ige	Tanl	ς				
Location (id	entify	y depar	mtent and	i ori	enta	tion	of uni	t):	L	cate	d i	n		
Department :	221 in	the no	orth cent	ral	area	of th	ne plar	it.		·	· ·-			
		·												
Unit charact how waste is	erist:	ics (co iated i	nstruction nto unit	n, c): <u>T</u>	apac:	ity, s igh bo	s ize, a	ge,	dat e ta	es o	f or Ite	er m	ati 552	on,
is a 5 year	old,	6,000	gallon ve	rtic	al c	arbon	steel	tan	k.	Chis	tan	k		
replaces it	s pred	lecesso	r in 1987	. Th	e ta	nk ro	of is a	se	lf :	suppo	rti	.ng		
dome. The	shell	and fl	oor plate	thi	ckne	ss is	500 of	an	in	ch.				
Wastes Manag Waste Code,														
waste in tank	552 is	as foll	ows: Meta	Nitro	chlor	obenzei	ne 25-55	%, P	aran	itroc	nlor	0-		
benzene 15-45	, Orth	onitroch	lorobenzer	e 10-	40%,	Monoch:	lorbenze	ne C	-2%,	Dini	troc	hlo	r-	
benzene 0-20%	, Dichl	ornitrob	enzene 0-1	% and	wate	r 0-0.	20%.							
Surface des											L i	nte	gr	ity,
Tank 552 is result, no	entir metal	compon	ove grade ents are	and in c	res	ts on ct wi	a cond	cret L or	e f wa	ounda ter.	tic Th	n.	As e i	a s
secondary c	ontair	nment p	resent (1/2	' di	ke wa	ll and	cor	cre	te f]	oor	7).		
														
														

Facility:	Mor	sant	o-Kru	mmrich			Date:			9/	9/9	2			_	
Inspector:							Photo)	Taken:	Y	N	to	N	S E	e v	7
Unit Name:	Spe	ent C	arbon	Tank,	Ite	em 767		_								
LDF Unit:	Y	or	N	Type	of	Unit:	Waste	<u>}</u>	Storage	/Tr	eat	ment	Ta	nk		_
Location (i	dent	ify	depar	mtent	and	orien	tation	0	f unit)	:	Tan	k 76	7 i	s		-
located in	the	sout	h cen	tral a	rea	of De	partmen	ıt	233.							
				·		·										
Unit charac how waste i	teri	stic nitia	s (co:	nstruc [.] nto un	tion	, capa Tank	city, s	s:	i ze, ag <3 year	e, d	date	s of	op is	era	at:	ion,
rubber line																
							-,, i									
		·														
								_								
Wastes Mana Waste Code,	ged	(pro ysica	cess al sta	descri	ptic lid	on, com , liqu	mercia id, slu	l id	chemic lge, etc	al :	name	he t	PA H ank	laz S	ar to	dous res
spent carbo	n f	com D	epart	ment 2	33.	The	carbon	i	s sent	off	fo	r re	ger	er	at	ion.
The composi	tio	n is	67% w	ashwat	er a	and 338	carbo	n	. The pl	H V	arie	s be	etwe	en	1	and
8 and tehre	is	a tr	ace a	mount	of 1	benzen	e.									
Surface de secondary o	scri	ptio ainme	n (cc ent de	ncrete	, a	sphalt, inte	, etc. grity,	,	age, age, top	str pog:	uct	ural ly):	iı	ate	gr	ity,
The tank re	sts	on a	conc	rete p	ad	and is	entire	ΞI	y above	gı	cade	. 1	her	e	īs	no
secondary o	ont	ainme	nt at	this	tim	e.		_								
				 												

Facility: Monsanto-Krummrich Date: 9/3/92
Inspector: Photo Taken: Y N to N S E W
Unit Name: Department 224/233 Drum Accumulation Area
LDF Unit: Y or N Type of Unit: Drum Accmulation Area
Location (identify department and orientation of unit): The accumulation area for Dept. 224 is north side of 3rd street just west of Falling Springs Road. Dept. 233 has two areas, south side of 3rd Street at Falling Springs,
and at 4th and D Streets northeast corner.
Unit characteristics (construction, capacity, size, age, dates of operation, how waste is initiated into unit): Dept. 224 's pad is concrete. Dept.
233's pads are constructed of asphalt. The pads are not burmed or diked.
These areas are waste accumulation sites. Wastes that are generated,
packaged, and labelled in the units are placed on pallets at these locations.
The drums may be kept here for a maximum period of 3 days. Drums are transferred to BBU waste warehouse from these areas. No long term waste storage activity occurred at this location.
Wastes Managed (process description, commercial chemical name, EPA Hazardous Waste Code, physical state [solid, liquid, sludge, etc.]): Dept. 224 generates wastes associated with Nitrochlorobenzene, Dept. 233 generator wastes associated with Chlorobenzene. Waste includes oil and Therminol, contaminated debris, off-spec product. Waste Codes included D018, D021,
D027, and D008.
Surface description (concrete, asphalt, etc., age, structural integrity, secondary containment description, integrity, age, topography):
Department 224's pad is concrete. Both of Department 233 pads are
construction of asphalt.

Facility:	Monsa	nto-Kru	mmrich		Date:		9	/15	/92			
Inspector:					Photo	Taken:	Y	N	to	N S	E	W
Unit Name:	Drum	Storage	Area,	north of	Big M	0						
LDF Unit: Y	or	N	Type of	Unit:	Drum	Storage	e Ar	ea				
Location (id	entify	deparmi	tent and	lorienta	tion (of unit)	:	Th	is s	ite	wa	<u>s</u>
located in	the so	outhwest	ern are	a of the	plant	at 5th	Str	eet	and	l Ro	ute	3.
Unit charact how waste is	eristi initi	cs (cons	structio to unit)	n, capac : The	ity, sonly i	size, agenformat	e, d	l at e ava	s of	opole	era on	tion, this
site is fro	m aeri	al phot	ograph.	From th	e phot	ographs	, it	ap	pear	s t	hat	ther
were 4 stal	ls cor	ntaining	2-3 ro	ws of dr	ums. I	nformat	ion	was	als	so g	ath	ered
from interv	views w	vith pla	nt pers	onnel. P	lant e	mployee	s re	emen	ber	emp	ty	drums
and full pr	oduct	drums b	eing st	ored in	this a	rea. No	o or	ne c	ould	l re	men	ber
waste being	store	d there										
Wastes Manag Waste Code,									≥, EI	PA H	aza	rdous
Surface des secondary co										in	teg	
			27.									

Facility:	Monsar	to-Kr	ummrich		Date:		9	/15	/92			•
Inspector:					Photo	Taken:	Y	N	to	N a	S E	W
Unit Name:	South	Lot D	rum Site									
LDF Unit: Y	or	N	Type of	Unit:	Facil	lity Lan	dfi	11				
Location (id	dentify	depar	mtent and	orien	tation	of unit)	:	Thi	ls si	te	is 1	located
in the sout	hwester	n are	a of the p	olant,	south o	f 5th St	ree	t n	ear	the	5t	h and
H Street in	tersect	ion.										<u></u>
Unit charact	eristi s initi	cs (co ated i	nstruction into unit)	n, capa : The	south l	size, ag	e, d	late ce w	as o	f op	era d i	ition, n mid-
1986 during	const	cuctio	n of an a	dditio	n to the	ACL co	oli	ng	towe	r.	30	drums
of waste ma	terial	were	recovered	from	this are	ea. The	re	is	a no	in	for	mation
available c	oncern:	ing th	e area mea	sureme	ent. How	ever, di	ırir	ıg t	he d	lrum	re	covery
excavation,	a dep	th of	40' was r	eached	. A coo	ling tow	er	and	ass	oci	<u>ate</u>	ed
buildings a	re now	that	area.	•								
Wastes Manae Waste Code,	ged (pr physic	ocess	descripti ate (solid	on, co	mmercia	l chemic	al :	nam(): _	e, E See	PA H	laz: ach	ardous
Surface des	scripti	on (c	oncrete, escription	asphal	t, etc.	, age, age, to	sti	ruct	ura hy):	l i	nte	grity,
,												

Monsanto

Monsanto Chemicai Company 500 Monsanto Ave Sauget, Illinois 62206-1198 Phone: (618) 271-5835

July 30, 1986

Mr. Basil Constantelos, Director Waste Management Division Region V U.S. Environmental Protection Agency 230 South Dearborn Street Chicago, Illinois 60604

Dear Mr. Constantelos:

When we initiated construction of a facility addition in the southwest corner of our site (see Attachment I map, item 13), a contractor exposed a buried drum. The drum was physically intact and construction was halted. A hazardous materials contracting firm was called in to remove the drum which was overpacked and stored in our waste storage building. A total of five drums were recovered, overpacked, sampled, and stored in our waste storage building.

Following assessment of the site, which was not indicated as a past disposal site by any of our records or previous studies, the hazardous waste contractor returned to the site. He then proceeded to remove an additional 25 drums from the area which eventually reached a size of approximately 40 feet wide, 45 feet long, and 4 feet deep. This made a total of 30 drums removed from the area which along with visibly contaminated soil were placed in 32 overpacks. These drums have been sampled and stored in our waste warehouse.

Priority pollutant analyses of the first five drums (one of which was empty) are shown in Attachment II. The low percentage of identified material was not particularly surprising given the tarry, carbonaceous nature of the material in the drums. As shown the first two drums contained benzidine at 0.39 percent and 0.14 percent, respectively. As this material is a listed OSHA carcinogen above the 0.1 percent level (Title 29, Section 1910.1010),

Mr. Basil Constantelos July 30, 1986 Page 2

we created a regulated area, labeled the affected drums, and informed OSHA per the regulations. The other drums that we had removed were included in the regulated area as a precautionary measure pending analysis. The presence of a high level of chlorophenols in Drum 1 made us suspicious that dioxin was possibly present. As a result the drums were analyzed for 2,3,7,8 TCDD. Drum 1 analyzed at 74 ppb and it was not detected in the other drums. Following receipt of these results, soils at the site were tested for 2,3,7,8 TCDD and benzidine. In the two soil samples taken, benzidine was not detected. Dioxin samples were taken from the 4 feet depth level and from a composite of the soil surrounding the drums. Analysis of these samples for 2,3,7,8 TCDD are shown in Attachment III.

Additionally, surface core samples were taken surrounding the site. These analyses are also shown in Attachment III.

Following completion of our analytical program, the hazardous materials contractor returned to the site to appropriately mitigate it. Steel sleeves were installed at a depth of 4-4½ feet below grade and partially filled with clean soil and crushed rock. This provided a clear path for future pile driving without creating a verticle migration situation. Around the steel sleeves the soil was recompacted, overlayed with geotextile material, and covered with a 3" minimum thickness of crushed rock. The crushed rock layer was extended approximately 50 feet in all directions from the site boundary. This completed mitigation of the site and the hazardous materials contractor left the premises. No exposure to drum contents occurred and all work of the hazardous materials contractor was in modified class B protection.

A review of our earlier soil sampling survey (1985) which included analyses for 2,3,7,8 TCDD did not cover this specific area. That survey was industrial hygiene based and covered suspected sites where the material may have been handled, areas of high personnel density, and random areas to insure that all major areas of the plant were covered. This specific site simply was not selected for coverage under these criteria.

Mr. Basil Constantelos July 30, 1986 Page 3

Routine construction of the originally planned project in this area is now in progress with particular care being taken to avoid breaching the mitigating cover.

Sincerely,

Warren L. Smull

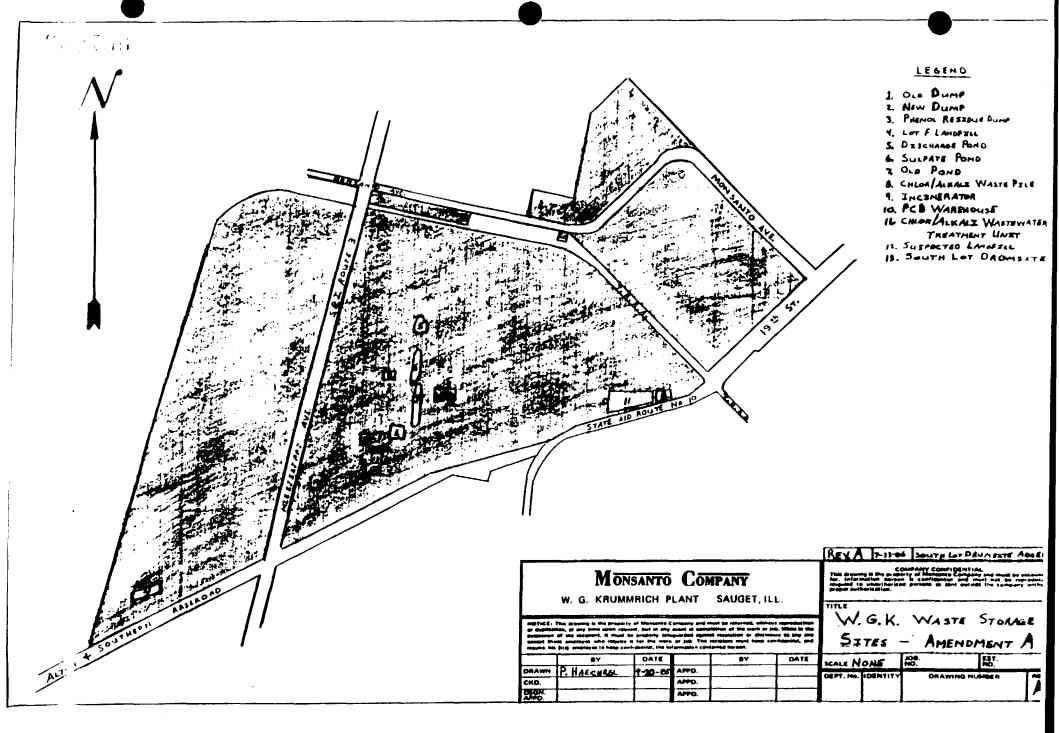
General Superintendent Environmental Affairs

bjj

Attachments

cc: Mr. B. Child, Illinois EPA

Mr. K. Mensing, Collinsville IEPA



ATTACHMENT II

Drum Analysis (ppm)

			Drum Numbe	<u> </u>	·
	1	2_	3	4	_5_
Methylene Chloride	38	90	36	14	E
2,4-Dichlorophenol	562	N.D.	N.D.	16	m
Pentachlorophenol	11,500	717	N.D.	742	p
2,4,6 Trichlorophenol	205,000	203	402	231	t
Benzidine	3,940	1390	N.D.	N.D.	у
4-Chlorophenyl phenol eth	er <41	N.D.	N.D.	N.D.	
Hexachlorobenzene	28	69	950	196	D
Toluene	N.D.	7	9	15	r
Naphthalene	N.D.	102	176	N.D.	u
Phenanthrene	N.D.	<50	2,500	1,100	m
1,2,4-Trichlorobenzene	N.D.	<17	22	31	
Carbon Tetrachloride	N.D.	N.D.	<1	N.D.	N
Chloroform	N.D.	N.D.	10	1	0
Anthracene	N.D.	N.D.	9 9 7	9 29	
Phenol	N.D.	N.D.	N.D.	<8	S
Benzo (a) pyrene	N.D.	N.D.	N.D.	8	a
Benzo (b) fluoranthene	N.D.	N.D.	N.D.	<5	100
Benzo (ghi) perylene	N.D.	N.D.	N.D.	4	P
Benzo (k) fluoranthene	N.D.	N.D.	N.D.	4	1
1,2-Dichlorobenzene	N.D.	N.D.	N.D.	12	e
4,4'-DDE	N.D.	N.D.	И.Д.	108	
2,3,7,8-TCDD	0.074	N.D.	N.D.	N.D.	

< x = present at less than minimum detection limit of x ppm.

Priority pollutant compounds not listed were not detected.

N.D. = not detected

ATTACHMENT III

Soil Samples

• Benzidine Samples

Sample 1 - N.D.

Sample 2 - N.D.

• 2,3,7,8-TCDD Samples

4' Below Grade

N/W Composite - N.D.

S/E Composite - 0.6 ppb

Composite of Soil Surrounding Drums

1st half of composite - 5.9 ppb - 4.3 ppb (replicate)

2nd half of composite - 8.7 ppb

Surface Cores

50' N of NE corner of area 0.1 ppb 50' N of NW corner of area 0.1 ppb 50' W of NW corner of area 0.1 ppb 50' W of SW corner of area 0.1 ppb 50' S of SW corner of area 0.4 ppb 50' S of SE corner of area 0.4 ppb 39' E of SE corner of area 0.2 ppb 39' E of NE corner of area 0.5 ppb

N.D. = not detected

Facility:	Monsanto-Kru	ummrich	Date:		9/	17/92			
Inspector:			Photo	Taken:	Y	N to	n s	E	W
Unit Name:	Department 2	233 Drum Acci	umulation A	rea (so	uth)				
LDF Unit:	Y or N	Type of Un	it: Drum	Accumul	atio	n Area			
Location (i	dentify depar	mtent and or	eientation o	f unit)	: _	This d	rum		_
accumulatio	on area is loc	cated at 4th	and D Stre	ets.					
							·		
Unit character how waste i	teristics (co s initiated i	nstruction, nto unit): _	c apacity, s This site i	i ze, ag s const	e, d	ates o ed of	f ope	era: ret	tion, e and
	is area is no								
transportat	ion to BBU wa	arehouse. The	e drums are	moved	to t	he was	te w	are	house
from this a	rea within 3	days. No lo	ng term dru	m stora	ge o	ccurs	here		
					- -				
Wastes Mana Waste Code,	ged (process physical sta	description, te [solid,]	commercial	chemic ige, et	al nc.])	ame, E : Wast	PA H es as	aza Soc	rdous lated
with the pr	roduction of N	Monochlorobe	nzene, wast	e oil a	nd T	hermin'	ol,		
contaminate	ed debris, of	f-spec produ	ct. Waste	codes i	nclu	de: DO	18,	D02	1,
D027, and I	0008.								
Surface des	scription (co	narata 250	halt ato	3.70	ctri	ictura	ı in		rity.
secondary of The area is	containment des concrete and	escription, asp a asphalt, n	integrity, so burmer se	age, to condary	pogr	aphy):	ent i	.s	1101,
present.									
									
				 					

Facility:	Monsant	:o-Krum	mrich		Date:		9/	16/	92			
Inspector:					Photo	Taken:	Y	N	to	N	S E	W
Unit Name:	Departm	ment 27	7 - Drai	nage Tr	enches							
LDF Unit:	Y or	N	Type of	Unit:	Waste	Water D	rai	nag	e Sy	ste	m	
Location (i	dentify	deparm	tent and	orient	ation	of unit)	:	Thi	s tr	encl	<u>n</u>	
system is l	ocated :	in Depa	rtment 2	77, whi	ch is	in the n	ort	hwe	st s	ect	ion	
of the faci	lity.				-							
Unit charac how waste i												
operations	beginniı	ng in 1	2/86 - 1	/87. Th	e tren	ches sur	rou	nd	the	dep	art:	ment.
They collec	t the wa	aste wa	ter from	the ur	it and	carry i	t t	o t	he s	ump		
(SWMU #69).												
Wastes Mana Waste Code,												
from the Sa	ntoflex	produc	tion uni	t. Wate	er cont	ains var	iou	s k	etor	nes	(MI	BK,
MIAK, MEK)	at mino	r conce	ntration	ns.								
		·										
Surface de secondary o										lir	ıteç	grity,
The trenche	s are c	onstruc	ted of	5" conci	cete wi	th a met	al	gra	te o	on t	op.	
The area ar	ound th	e sump	is aspha	alt and	concre	te.						
												

Facility:	Monsan	to-Kru	mmrich		Date:		9,	/14/	92		_ 		
Inspector:					Photo	Taken:	Y	N	to	n s	E	W	
Unit Name:	Depart	ment 2	43 Drum	Accumul	ation A	Area							
LDF Unit: Y	or or	N	Type of	Unit:	Drum	Accumul	atio	on A	Area				
Location (id	lentify	deparm	tent and	orien	tation	of unit)	:	Der	part	ment	. 24	13	was
the most ea	stern u	nit in	the pla	nt. Th	e drum	accumul	ati	on a	area	was	10	oca	<u>t</u> ed
in the nort	h centr	al are	a of the	unit c	n 2nd S	Street.							_
Unit charact	eristic s initia	s (con ted in	structio to unit)	n, capa : The	drum ad	size, ag	e, d	are	s of	op PC	era 13	tic	n, an
area where	drummed	and la	abelled '	waste w	as plac	ced unti	1 t:	rans	spor	tati	.on	co	uld
be arranged	to BBU	waste	warehou	se. Th	ne maxi	num stor	age	tin	ne f	or d	lru	ms	in
this area w	as thre	e days	. The a	rea was	const	ructed o	f c	onc	rete	. 7	he.	PC	13
department	was shu	tdown i	n early	1992 ar	nd disma	antled i	n Ju	ıly	and	Augı	ıst	19	92.
Wastes Manag Waste Code,													
at this sit	e were	waste	phosphor	ous (DO	003, DO	08) and	was	te '	Ther	mino	21	(D0	, 801
D018).										 			
·				·		· · · · · · · · · · · · · · · · · · ·							
Surface des										in	te	gri	ty,
The waste d	rum acc	umulat	ion area	was ma	de of c	oncrete	. <u>1</u>	her	e wa	s n	o b	urn	<u>n</u> or
secondary o	ontainm	ent.											
													

Facility:	Monsar	to-Kru	ummrich	1		Date:		9	/15	/92				
Inspector:						Photo	Taken:	Y	N	to	N S	S E	W	
Unit Name:	South	Lot Dr	um Sit	:e		 -							_	
LDF Unit: Y	or	N	туре	of	Unit:	Faci	lity La	ndfi	11					
Location (id	entify	depar	mtent a	and	orien	tation	of unit) :	Th:	ls si	te i	s l	oca	ted
in the sout	hwester	n area	of th	e pl	ant,	south o	f 5th S	tree	et n	ear	the	5t	h a	<u>n</u> d
H Street in	tersect	cion.				···			· .					_
Unit charact how waste is	eristi initi	cs (com ated i	nstruct	tion it):	, capa The	south	size, ac	ge, o	iate ce w	s of	op oun	era d i:	tio n m	n, id-
1986 during	consti	cuction	n of an	n add	ditio	n to the	e ACL co	ooli	ng	towe	r. :	30 (dru	ms
of waste ma	terial	were 1	recover	ed :	from	this ar	ea. The	ere	is	a no	in	for	mat	ion
available c	oncerni	ing the	area	meas	ureme	nt. How	ever, d	urir	ng t	he d	rum	re	cov	ery
excavation,	a dept	th of	40' was	re	ached	. A coo	ling to	wer	and	ass	ocia	ate	d	
buildings a	re now	that a	area.											
Wastes Manag Waste Code,														
Surface des secondary co	criptiontainm	on (co lent de	ncrete	, as	sphal,	t, etc.	, age, age, to	sti	ruct	ural	. ir	ıteç	gri	- -
				• 4										

Paul J. Haechrel

November 10, 1986

Warren L. Smull

South Lot Drumsite - Sample Analysis

FILE

Attached is the summary of the priority pollutant sample analy completed by E.T.C. for the drums unearthed at the South Lot I

Paul J. Haechrel

/bjj Attachment

SOUTH LOT DRUM SITE SOIL SAMPLE PRIORITY POLLUTANT RESULTS (PPM)

Base/Neutral Compounds	South End	North End
Acenaphthene	0.1	<0.06
Anthracene	0.2	מא
Benzo(a)Anthracene	0.5	0.3
Benzo(a)Pyrene	0.6	ND
Benzo(b)Fluoranthene	ND	0.3
Benzo(k)Fluoranthene	0.4	ND
bis(2-Ethylhexyl)Phthalate	ND	0.3
4-Chlorophenyl Phenyl Ether	0.7	ND
Chrysene	0.9	0.5
1,2-Dichlorobenzene	<0.06	0.1
1,3-Dichlorobenzene	מא	0.06
1,4-Dichlorobenzene	<0.06	0.3
Fluoranthene	1	0.5
Fluorene	0.2	ND
Hexachlorobenzene	0.5	4
Naphthalene	0.08	0.1
Nitrobenzene	ND	0.3
Phenanthrene	2	0.5
Pyrene	5	1
1,2,4-Trichlorobenzene	ОИ	26

ND = Not Detected

(

<X = Present at less than minimum detection limit of X ppm.

SOUTH LOT DRUMSITE 2,3,7,8-TCDD ANALYTICAL RESULTS

Sample	<u> </u>	2,3,7,8-TCDI (ppb)
Drum N	lo. 1	74
	2	ND
	3	ND
	4	ND
Soil:	North End	ND
	South End	4.6

ND = Not Detected

ĺ

	Drum Number							
	1	_2 .	_3_	4	5_	6	_7_	8
\ atile Compounds								
l ozene	ND	ND	ND	ND	-	ND	0.005	ND
Carbon Tetraculoride	ND	ND	<1	ND	-	ND	ИD	0.03
Chlorobenzene	ND	ND	ND	ND	-	ИD	0.1	<30
Chloroform	ND	ND	10	1	-	ИD	ИD	ПN
1,1-Dichloroethylene	ND	ND	ND	ND	-	ДИ	ND	ND
Echylbenzene	ND	ND	ND	ND	-	ND	ND	ND
N Phylene Chloride	38	90	36	14	-	.04	0.6	0.3
Tetrachloroethylene	ND	ND	ND	ND	-	ND	ND	0.05
7luene	ND	7	9	15	-	<0.02	0.01	0.1
c. d Compounds								
. hlorophenol	ND	ND	ND	ND	-	ND	ND	ND
2_a-Dichlorophenol	562	ND	ND	16	-	ND	<230	4
p Chloro-m-Cresol	ND	ND	ND	ND	-	ND	ND	ND
l' ntachlorophenol	11,500	717	ND	742	-	261	903	11000
Phonol	ND	ND	ND	<8	-	ND	ND	ND
2.4,6-Trichlorophenol	205,000	203	402	231	-	194	21800	71

II IES:

Drum No. 5 was empty. No sample was taken.

^{.&#}x27;) ND = Not Detected.

 $[\]langle X \rangle = \text{Present at less than minimum detection limit of } X \text{ ppm.}$

⁴⁾ Priority pollutant compounds not listed were not detected.

SOUTH LOT DRUM SITE - PRIOTY POLLUTANT ANALYSIS (PPM)

	300111 100		_					
	Drum Number							
	9	10	11	_12	. 13	14	_15	_16
Latile Compounds Latile Compounds Latile Compounds Choose Tetrachloride Chiorobenzene Chioroform Latile Compounds Chiorobenzene Chior	ND ND <15 7 ND ND 83 ND 36	ND ND <0.006 ND ND ND 0.03 ND 0.1	ND ND ND ND ND 0.04 ND	ND ND ND ND ND ND 28 ND 24	ND ND ND ND ND ND 3 ND 22	ND ND ND ND VO . 04 1 ND 2	ND ND ND ND ND 0.003 ND 0.007	NI) ND ND ND ND O . 5 <0 . 002 O . 06
Compounds Chlorophenol	ND 48 ND 255 ND 674	ND 815 ND 100000 ND 33900	0.06 20 0.2 507 0.8 93	ND 26 ND 8900 ND 395	ND ND ND ND ND	1 38 <0.5 761 1 275	<3 26 <2 510 3 6270	ND 7 ND 1450 ND 200

II (ES:

Drum No. 5 was empty. No sample was taken.

SOUTH LOT DRUM SITE - PRIC TY POLLUTANT ANALYSIS (PPM)

	SOUTH LOT	DKON DILL						
	Drum Number							
	17	18	19	20	21	22	_23	-24
Latile Compounds Lazene Cabon Tetrachloride Chorobenzene Chloroform Laborathloroethylene Fraylbenzene Mathylene Chloride Tarachloroethylene Tarachloroethylene Tarachloroethylene	ND ND ND O.1 ND ND O.06 ND O.1	ND ND O.8 ND ND ND O.2 ND	ND ND ND ND ND ND ND	ND ND ND ND ND <0.04 0.07 ND 0.04	ND ND 0.03 ND ND ND 0.1 0.02 <0.03	ND ND <0.03 ND ND ND 0.06 <0.02 <0.03	ND ND ND ND ND ND ND O.1 ND O.02	ND ND <0.03 ND ND <0.04 1 ND
chlorophenol chloro-m-Cresol ditachlorophenol chloro-m-Cresol ditachlorophenol ditachlorophenol	ND 324 ND 46400 ND 42300	ND 288 ND 3050 ND 62100	ND 7 ND 11700 2 285	ND 3 ND 2500 ND 109	ND 0.9 ND 36 0.6 36	0.2 1 ND 307 ND 64	ND ND ND ND ND 33	42 23 0.7 621 8 22

to iES:

Drum No. 5 was empty. No sample was taken. 10

ND = Not Detected. ND = Not Detected.

Research at less than minimum detection limit of X ppm.

SOUTH LOT DRUM SITE - PRIC TY POLLUTANT ANALYSIS (PPM)

	300111 22:							
		Drum Number						٠
	25	26	27	_28	<u>29</u>	<u>30</u>	_31	_32
Inzene (irbon Tetrachloride (inlorobenzene (hloroform i,1-Dichloroethylene ichylbenzene thithylene Chloride itrachloroethylene	ND ND <7 ND <3 <9 42 <5	ND ND <0.03 ND ND ND 0.1 ND 0.07	ND ND ND ND ND ND ND	ND ND ND ND ND O . 2 <0 . 02 O . 4	ND ND ND ND <4 15 ND 253	ND ND ND ND ND ND <0.03 ND	ND ND ND ND ND ND 15 ND 28	ND ND ND ND ND O . 1 O . 03 ND
-Chlorophenol .,4-DichlorophenolChloro-m-Cresol lentachlorophenol thenol .,4,6-Trichlorophenol	2 6 ND 3200 3 271	0.3 4 ND 1350 ND 76	ND ND ND 779 ND 185	0.8 2 ND 460 0.5 129	ND 8 ND 12200 <2 47	ND ND ND ND ND	<0.8 6 3 264 ND 430	ND ND ND 251 ND 2

OTES:

- Drum No. 5 was empty. No sample was taken. ₁)
- <X = Present at less than minimum detection limit of X ppm. ND = Not Detected.
- Priority pollutant compounds not listed were not detected. .)

SOUTH LOT DEBUT STIE - PRIORITY TOLLOTORY CHARLESTS VILLE

SOL	HII LOT DKUR 3	DITE - PRIO	WILL LOWIN	1001 10000	2212			,
<u> </u>	_ 1 11			Drum 1	Number			
	<u> </u>	2	3_	4	5	6		_8
se/Neutral Compounds						ND	ND	ND
se/Neutral womp	MD	ND	ND	ND	-	4	ND	ND
t.thana	ND	ND	997	929	-	ND	ND	ИD
enaphthene	ND	1390	ND	ND	-	<15	ND	ND
athracene	3940	ND	ND	ND	-	8	ND	ND
enzidine	ND	ND	ND	8	-	<1 9	ND	ND
enzo(a)Anthricene	ND		ND	<5	-	<8	ND	ИD
enzo(a)Pyrene	ND	ND	ND	4	-		ND	ND
renzo(b)Fluoranthene	ИD	ND	ND	4	-	ND	ND	ND
enzo(ghi)Perylene	ND	ND	ND	ИD	-	ND	ND	ND
lenzo(k)Fluoranthene	ND	ND	ND	ND	-	ND	<40	ND
is(2-Ethylhexyl)Phthalate	ND	ND	ИD	ND	-	ND	ND	ND
Intyl Benzyl Phthalate	<41	ND	ND	ND	-	18	ND	ND
4-Chlorophenyl Phenyl Ether	ПN	ND	_	ND	-	ND		2
(hrvsene	ND	ND	ND	12	-	ND	ND	ND
LiRenzo(a,h)Anthracene	ИИ	ND	ND	ND	_	ИD	ND	7
2-Dichlorobenzene	ND	ND	ДИ	ND	-	ND	ND	, ND
1 3-Dichlorobenzene	ND	ND	ND	ND ND	_	ND	ND	ND ND
4-Dichlorobenzene	ND	ND	ND	ND ND	-	ND	ND	
i-N-Octvl Phthalate	ND	ND	ND		-	7	ND	ND
1,2-Diphenylhydrazine	ND	ND	ND	ND	_	ПD	ИD	NE
Huoranthene	ND	ND	ИD	ND	_	ND	ND	850
luorene	28	69	950	196	_	ND	ND	NI
hexachlorobenzene	ND	ND	ND	ND	_	3	ИD	NI
Hexachlorobutadiene		ND	ND	ND	-	<9	ND	N
llexachloroethane	ND	ND	ND	ND	-	ND	ND	<0.
Indeno(1,2,3-c,d)Pyrene	ND	102	176	ND	-	ND ND	ND	N
indeno(1,2,5 c,d)	ND	ND	ND	ND	-	ND ND	ND	N
Naphthalene	ИD	ND ND	ND	ND	-	23	ND	N
litrobenzene	ND		2500	1100	_		ND	N
-Nitrosodiphenylamine	ND	<50	ND	ND	-	76	ND	
lhenanthrene	ИN	ND	22	31	-	ND	ND ND	<
lyrene	ND	<17	ND	ND	-	ND	ND	
,2,4-Trichlorobenzene i-N-Butyl Phthalate	ND	ПU	ND	•5				
Testicide/PCB Compounds				100	-	ND	ND	ŀ
-			MD	108		7120	มก	i

 -	<u> </u>			Drum l	Number			
to the sett	. <u> </u>		11	12	13	14	<u>15</u>	16
Fise/Neutral Compounds	9	10					MD	ND
1.185/Neutra		ND	ND	ND	ND	<3	ND	<3
F enaphthene	ND	ND	ND	82	ND	<6	<3	ND CN
A thracene	ДИ	ND	ND	ND	ND	ND	ND	
B:nzidine	ND	ND		<13	ND	<13	13	<13
Binzo(a)Anthracene	ND	ND	<13	ND	ND	ND	8	ND
Binzo(a)Antini in the	ND	ND	ND	ND	ND	<17	<17	<16
Binzo(a)Pyrene	ND	ND	<17	ND	ND	ND	<7	<7
Binzo(b)Fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND
Binzo(ghi)Perylene	ND	ND	ND	ND	ND	ND	ND	ND
Binzo(k)Fluoranthene	ND	ND	ND	ND ND	ND	ND	ND	ИD
his (2-Ethylhexyl) Phthalate	ND	ND	ND		ND	ND	< 7	ND
Bityl Benzyl Phthalate	ND	<210	ND	ND	ND	5	13	7
4 Chlorophenyl Phenyl Ether	ND	ND	<4	ND	ND	ND	<17	ND
Carysene	ND	ND	ND	ND	ND	ND	ND	ND
Di Benzo (a, h) Anthracene	<17	ИD	ND	ND		ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ИD	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	<16
hi-N-Octyl Phthalate	ND	ND	<17	ND	ND		32	5
1,2-Diphenylhydrazine	ND	ND	6	13	ND	4	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	<3	4	27
Luorene		ND	8	300	51	13	ND	ND
hexachlorobenzene	694	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND		ND
Hexachloroethane	ND	ND	ND	ND	ND	ND	<8	ND
Indeno(1,2,3-c,d)Pyrene	ND		ND	ND	ND	ND	ND	ND ND
Niphthalene	ND	ND	ND	ND	ND	ND	ND	
Nitrobenzene	ND	ND	4	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ИN	ND	< 9	148	<49	16	13	12
Paenanthrene	ИN	ND	6	ND	ND	12	28	27
	ND	ИD		8	ND	ND	ND	14
yrene	<17	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ИD	หม	ND			
li-N-Butyl Phthalate								
sticide/PCB Compounds				NTD.	ND	ΝD	ND	ND
	ИN	ND	ND	ND	ND ND	<60	ND	111
(, 4' -DDE	ND	ND	<60	ND		ND	ND	183
1: JB-1254	ND	ND	ND	ND	ND	114	ND	141
1::3B-1248	ND	ND	ND	ND	ND	114	112	
1√B-1260	1417	•						

SOUTH LOT DEBUT SITE - PRIORITY FOLLOTREY MARKETOTO (LITE)

				Drum	Number			
		10	19	20	21	22_	23	24
ise/Neutral Compounds	17	18					ND	19
130/1100		ND	ND	31	ND	0.2	ND ND	42
enaphthene	ND	ND	157	55	ND	0.4		NI NI
Anthracene	ND		ND	ND	ИD	ND	ND	2
	ND	ND	ND	48	0.6	1	ND	
Genzidine	ND	ND		13	0.7	1	ND	2
enzo(a)Anthracene	ND	ND	ND	11	ND	ИD	ND	
Benzo(a)Pyrene	ND	ND	ND		ND	1	ND	
Benzo(b)Fluoranthene	ND	ND	ND	9	2	0.9	ND	N
Benzo(ghi)Perylene	ND	ND	ND	ND		<0.3	<0.4	N
wnzo(k)Fluoranthene	ND	ND	ND	ND	ND	ND	2	1
is(2-Ethylhexyl)Phthalate	ND	ND	ND	ND	ND	ND ND	ИD	1
utul Renzvl Phthalate	<41	<42	ND	ND	ND		ND	
-Chlorophenyl Phenyl Ether		ND	ND	7 5	0.8	2	ND ND]
Chrysene	ND	ND	ND	ND	ND	ND]
BiBenzo(a,h)Anthracene	ND		ND	1	0.1	<0.06	0.5	
,2-Dichlorobenzene	29	<19	ND	ИĎ	<0.07	ND	ND	
1,3-Dichlorobenzene	ND	ND	ND	<2	0.2	0.2	0.9	
, 3-Dichiotopenzene	58	<44		ND	ND	αи	1	
,4-Dichlorobenzene	ND	ND	ND	ND ND	ND	ND	ND	
i-N-Octyl Phthalate	<98	ND	53	43	4	2	0.6	
1,2-Diphenylhydrazine	ND	ND	10		ND	0.2	МD	
luoranthene	ND	ND	ND	20	2	4	97	
Huorene	251	ND	1050	23		ND	ND	
hexachlorobenzene	ND	ND	ND	ND	0.2	ND	ND	
llexachlorobutadiene	ND ND	ND	ND	ND	1		ND ND	
Hexachloroethane		ND	ND	7	0.7	0.3		
Indeno(1,2,3-c,d)Pyrene	ND	ND	ND	6	0.1	0.1	0.08	
Naphthalene	ND		ND	ND	ND	<0.06	ND	
Nitrobenzene	ND	ND	ND	ND	ND	ND	ND	
Nitropenzene	ND	ND		294	1	2	0.3	2
N-Nitrosodiphenylamine	ND	ND	271		4	11	0.7	4
Phenanthrene	ND	ND	ND	539	0.5	2	0.4	(
lyrene	ND	ND	17	17	ND	ND	ND	
1,2,4-Trichlorobenzene	ND	ND	ND	ND	מא	MD		
Ni-N-Butyl Phthalate	ND							
lesticide/PCB Compounds							ND	
	v.m.	ND	ND	ND	ND	ND		
4'-DDE	ND	ND	ND	ND	ND	ND	ND	
111	NT)	מא	MD	0/7	60	119	9	

	OUTH LOT DRUM S	TE - PRIO	RITY POLLU	CANT ANALY:	10 (1111)			ż
S	OUTH LOT DRUN 3	110	·	Drum N	umber			
					29	30_	31_	32
	25_	26				86	1	ND
Lise/Neutral Compounds			104	0.1	19	168	7	ND
1007	<0.8	ND	205	4	79	ND	ΝD	ND
cenaphthene	ND	6	ND	ND	ND	105	3	<1
Authracene	ND	ND	141	4	<32	35	0.9	ND
u nazidine	ND	ДИ	46	ND	ND	ND	<2	<2
lunzo(a)Anthracene	ND	ND	ND	ND	<41	<41	0.8	ND
(a)Purene	ND	ND	<39	ND	<17	ND	ND	ND
u nzo(h)Fluoranenene	ND	ИD	DND (23)	ND	ND	ND	ND	ND
c (abi)Perviene	ND	ND	ND	ND	ND	ND	ND	ND
/LIGINATANI NEME	ND	ND	ND	ND	ND	ND	ИD	ND
- /2-EthylheXVIJFHeHure	ND	ND	DND	ND	ND	161	5	0.6
	<2	ND	205	9	51	ND	ND	ND
4-Chlorophenyl Phenyl Ether	ND	0.4	ND	ND	ND	ND UN	ND	ИD
	ND	ND	ND UN	0.8	ND		ND	ND
hipongo(a h)Anthracene	<0.8	0.2		ND	ND	ND ND	<0.7	ND
a_nichlorobenzene	ND	0.08	ND	2	ND	•	ND	ND
2 Dichloropenzene	<2	0.3	<42	ND	ND	ND	7	ND
. / Dichlorobenzene	ДИ	ND	MD	ND	ND	ND	3	2
N COLUI PHENAIACC	<4	0.8	ND	4	30	54	ND	ND
1,2-Diphenylhydrazine	ND	0.8	ND	2	37	143	18	ND
Fluoranthene	ND	0.07	163	949	967	ND	ND	ND
Fluorene	379	17	ND	ND	ND	ND	ND	ND
u-wachlorobenzene	ND	ND	ND	<0.7	ND	ND	<0.8	ИD
llexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	3
Lioroethane	ND	ND	ND	<0.7	ND	19	ND	ПN
Indeno(1,2,3-c,d)Pyrene	ND	ND	<15	ND	ND	ND	ND	ND
Naphthalene	ND	0.1	ND	ND	ND	ND	22	3
u: e wohenzene	22	0.3	ND	19	197	846	17	2
N-Nitrosodiphenylamine	5	0.6	1110	40	184	427	8	ND
Phenanthrene	10	1	526	3	<8	ИD	ND	ND
	10	2	20	D ND	ND	МD	ИВ	
Pyrene 1,2,4-Trichlorobenzene	ИD	ND	ND	ND				
1,2,4-Trichlotobeneous Di-N-Butyl Phthalate	ИП	•						
Di-N-Butyl filehazzas								ND
mon commoninds				MU	ND	ND	ND	6
				KITT	ND		/ /Q	0

				n.	rum Number				
Priority Follutant Metals Antimony Arsenic Beryllium Cadmium Chromium Copper Lead Mercury Nickel Selenium Silver Thallium Zinc	6 <14 5 0.1 62 20 63 94 0.8 925 <0.5 <2 <0.5 990	25 81 0.1 4 12 1180 990 3 120 ND 2 <0.5 675	8 ND ND ND <4 3 33 0.4 3 ND ND ND ND	9 ND 3 <0.05 <0.8 <4 60 1470 1 352 1 <2 ND 100	10 ND 12 <0.05 2 51 1780 520 3 240 <1 <2 ND 553	ND 13 0.6 2 20 755 940 9 1280 2 4 0.5 1940	ND 9 0.3 2 14 160 210 2 170 2 <2 ND 178	ND 1 0.08 4 5 57 460 1 1740 <0.5 ND ND 426	14 29 0.6 34 28 2550 240 7 1940 4 11 ND 13500

C. C. Mill

				Dru	ım Number				0.2
Priority Pollutant Metals Antimony Arsenic Beryllium Cadmium Chromium Copper Iead Mercury Nickel Selenium Silver Thallium Zinc	15 ND 8 0.3 2 30 252 650 0.9 83 0.9 2 ND 549	16 81 19 0.5 5 18 568 4460 22 723 16 2 <1 750	ND 7 0.3 <0.8 12 208 290 6 2990 1 2 ND 257	18 ND 7 0.1 1 12 174 530 0.6 436 0.6 <2 <0.5 431	19 ND 8 0.1 1 10 140 640 4 680 2 <2 <2 <0.5 292	20 <14 5 0.2 2 11 88 280 4 170 2 <2 ND 110	21 <14 14 0.4 4 23 210 2360 2 74 <0.5 <2 ND	22 37 10 0.3 4 19 3550 1400 7 809 2 3 <1 1060	ND 9 0.3 2 10 170 780 0.1 110 ND <2 <0.5 358

				Dru	m Number				
Priority	24	0.5	06	0.7	0.0	00	20	21	20
Follutant Metals	24	25_	26				30	31	32
nt imony	ИD	ND	ND	<14	ND	58	ND	<14	95
Arsenic	8	3	23	2	7	3	4	18	70
Beryllium	0.3	0.2	0.3	<0.05	0.2	0.1	<0.1	0.3	<0.05
Cadmium	3	3	2	<0.8	2	<0.8	1	3	<0.8
Chromium	11	9	16	<4	16	14	12	14	11
Copper	192	130	189	6	180	120	140	258	84
l.ead	1100	600	610	930	510	860	1560	1910	2310
Mercury	2	0.8	21	0.1	2	5	2	8	2
Nickel	307	539	280	52	358	410	476	2150	12
Selenium	<0.5	0.7	4	ND	3	2	0.9	3	<3
Silver	<2	<2	2	<2	<2	<2	<2	2	<2
.`hallium	ND	ИD	<0.5	ИD	ND	ИD	ND	<0.5	11
Zinc .	469	606	256	8	308	281	280	1710	203

SWMU #22

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION AND CHARACTERIZATION WORKSHEET

Facility:	ility: Monsanto-Krummrich			Date: 9/14/92							
Inspector:			Ph	oto	Taken:	Y	N	to	N S	E	W
Unit Name:	Facility Land	fill - Cer	ntral Ar	ea (s	suspect	ed)					
LDF Unit: Y	or N	Type of U	nit: L	andf:	111						
Location (id	entify deparm	tent and o	rientati	ion c	f unit) :	Thi	s sı	ıspe	cte	ed
landfill is	alleged to be	in the ar	rea of t	he C	nlorobe	nze	ne c	lepa	rtme	nt.	
									 .		
Unit charact how waste is	eristics (cons	struction, to unit):	c apacit This su	y, s spec	ize, ad ted lan	g e, o	date	s of	o p o	era	tion,
in earlier F	art a filings	based on	heresay	evi	dence.	Ио	rec	cord	s co	ulo	d be
found in WGM	('s files that	showed a	landfil	l in	this a	area	. I	3eca	use	no	
documentation	on or evidence	could be	found s	ubst	antiat	ing	thi	s la	ndfi	.11	,
it was remov	ved from Krumm	rich 12/8	/86 Part	Αs	ubmitta	al.					
-	ed (process de physical stat	•	•					-			
Surface des	cription (con	crete, as	phalt, integri	etc.	, age, age, t	sti	ruct	ura:	L ir	ite	grity,

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION SWMU #21 AND CHARACTERIZATION WORKSHEET

Facility: Monsanto-Krummrich	Date:				9/10	0/92	2
Inspector:	Photo Tak	en: Y	N	to	N	S E	W
Unit Name: Facility Landfill Northwe	est Area						
LDF Unit: Y or N Type of U	nit: Suspected	Landfi.	11				
Location (identify deparatent and o	rientation of v	nit): '	<u> This</u>	lan	dfi	11	
has been reported to be in the north	west corner of	the fa	cili	ty.		 -	
Unit characteristics (construction, how waste is initiated into unit):I	n the initial f	ilings	for	the	e Pa	rt	<u>A</u>
and Eckhardt study, WGK reported tha fill in the northwest corner of the	facility. Appar	ently	thes	e ri	ındı	.ngs	
were based on non-conclusive evidence files that discounts the presence of	e. Attached is	a let	ter	four	nd i	o a.	ur
agency, we have many documents (Part	A filings and	the Ec	khar	dt s	stud	ly)	
that suggest the presence of the fil boring study shows no evidence of a	 However, th 	e grou	ndwa	ter	and	SO	il
DOLLING SCHOOL SHOWS HO EVIDENCE OF A							
		 -					
Wastes Managed (process description Waste Code, physical state [solid,							
		····					
Surface description (concrete, as secondary containment description,						nte	grity,

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION SWMU #52 AND CHARACTERIZATION WORKSHEET

Facility:	Monsanto-Krummrich	Date:	9/11	/92	
Inspector:		Photo Taken:	Y N	to N	SEW
Unit Name:	Facility landfill; Route 3 and M	onsanto Avenue (southwes	t corner)	
LDF Unit:	or N Type of Unit:	Landfill (s	uspecte	d)	
Location (id	dentify deparmtent and orient	ation of unit	:): <u>Th</u>	e agenc	<u>y rep</u> orts
this landfi	ll is located on the southwe	st corner of	Route 3	and Mo	nsanto
Avenue.					
Unit charact how waste is	ceristics (construction, capa s initiated into unit): Ther	city, size, a e is no landfi	ge, dat 11 loca	es of op ted at t	eration, his site.
It was list	ed due to a poor drawing (map) that was on	an ear	lier fil	ing. From
the map tha	t was submitted, it appears	that there is	a fill	in the	<u>northeas</u> t
fill in thi operated from	ot F. No records were discons area. On the original filicon 1957-1978 and covers 36 a	ng, WGK repor	ts that	this f	ill was
Lot H landf	[111. 		·		
	ged (process description, com physical state (solid, liqu				
				·· <u>·</u>	
	scription (concrete, asphalt ontainment description, inte				itegrity,
					
					
^ ^					

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION SWMU #53 AND CHARACTERIZATION WORKSHEET

Facility: Monsanto-Krummrich	Date:	9/16/92	
Inspector:	Photo Taken:	Y N to	N S E W
Unit Name: Department 255 Waste Water P	retreatment		
LDF Unit: Y or N Type of Unit:	Waste Water P	retreatmer	nt
Location (identify department and orient	ation of unit)	: Departm	ment 255
Waste Water Pretreatment unit is located	at the corner	of Fallir	ng Springs
and 4th Street			
Unit characteristics (construction, capachow waste is initiated into unit): Vario	city, size, age us process ves	, dates of sels/equir	f operation, ment which
recover and recycle organics generated f	rom manufactur	ing operat	ions. In
operation since November 1990. See Wate	r Pollution Co	ntrol Perm	nit No.
0927.90 for further details.			
Wastes Managed (process description, community Waste Code, physical state [solid, liqui			
generated during product and raw materia	l solvent extra	action and	l recovery
process. See Water Pollution Control Perr	nit No. 0927.90	for furth	ner details.
Surface description (concrete, asphalt, secondary containment description, integ			integrity,
The pretreatment facility is located on o	concrete and as	<u>phalt pave</u>	ed surfaces.
			

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION
AND CHARACTERIZATION WORKSHEET

SWMU #54

Facility: Monsanto-Krummrich I)ate: 9/16/92
Inspector:	Photo Taken: Y N to NSEW
Unit Name: Department 233 Waste Water Pro	etreatment Unit
LDF Unit: Y or N Type of Unit: Y	Waste Water Pretreatment
Location (identify deparmtent and orientat	tion of unit): Department 233
waste water pretreatment unit is located a	at 4th and D Streets with the
storage tanks locaTed at 4th and E Streets	š <u>. </u>
Unit characteristics (construction, capaci how waste is initiated into unit): <u>Various</u>	ty, size, age, dates of operation, process vessels/equipment which
recover and recycle organics generated from	om manufacturing operations. In
operation since November 1990. See Water	Pollution Control Permit No.
0928-90 for further details.	
Wastes Managed (process description, comme Waste Code, physical state [solid, liquid,	
generated from manufacturing operations.	See Water Pollution Control
Permit No. 0928.90 for further details.	
Surface description (concrete, asphalt, secondary containment description, integri	
Pretreatment facility is located on concre	ete and asphalt paved surfaces.

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION SWMU #54A AND CHARACTERIZATION WORKSHEET

Facility: Monsanto-Krummrich Date: 9/16/92
Inspector: Photo Taken: Y N to N S E W
Unit Name: Department 221 Waste Water Pretreatment Unit
LDF Unit: Y or N Type of Unit: Waste Water Pretreatment
Location (identify department and orientation of unit): Department 221's
waste water pretreatment unit is located at Falling Springs and 2nd
Streets west of the storage tank farm.
Unit characteristics (construction, capacity, size, age, dates of operation, how waste is initiated into unit): <u>Various process vessels/equipment which</u>
recover and recycle organics generated from manufacturing operations. In
operation since November 1990. See Water Pollution Control Permit No.
0928.90 for further details.
Wastes Managed (process description, commercial chemical name, EPA Hazardous Waste Code, physical state [solid, liquid, sludge, etc.]): Waste water
generated from manufacturing operations. See Water Pollution Control
Permit No. 0928.90 for further details.
Surface description (concrete, asphalt, etc., age, structural integrity, secondary containment description, integrity, age, topography):
Pretreatment facility is located on concrete and asphalt paved surfaces.
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SWMU #55

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION AND CHARACTERIZATION WORKSHEET

Facility:	Monsanto-Krummrich	Date: 9/16/92
Inspector:		Photo Taken: Y N to NSEW
Unit Name:	Department 219/222 Waste W	later Pretreatment
LDF Unit: Y	or N Type of Unit:	Waste Water Pretreatment Unit
Location (id	lentify deparmtent and ories	ntation of unit): Department 219/222's
Waste Water	Pretreatment Unit is locat	ed west of B and 3rd Streets
		acity, size, age, dates of operation, bon Adsorption Facility which
recovers or	ganics from manufacturing o	perations. See Water Pollution Control
Permit No.	0927.90 for further details	
		
		mmercial chemical name, EPA Hazardous uid, sludge, etc.]): <u>Waste water</u>
generated f	rom manufacturing operation	s. See Water Pollution Control
Permit No.	0927.90 for further details	<u> </u>
	cription (concrete, asphal ontainment description, into	t, etc., age, structural integrity, egrity, age, topography):
Pretreatmen	t facility is located on co	encrete and asphalt paved surfaces.
	- <u> </u>	
	*	

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION SWMU #27 AND CHARACTERIZATION WORKSHEET

Facility:	Monsar	to-Kri	ummrich		Date:		9	/11	/92			
Inspector:					Photo	Taken:	Y	N	to	N	S E	W
Unit Name:	Facili	ty Lar	ndfill-Bui	lding	BBK ("N	lew Dum	p")					
LDF Unit:	Y or	N	Type of	Unit:	Landf	i11						_
Location (id	dentify	depar	mtent and	orien	tation	of unit	:):	Th	is l	andf	<u>:i1:</u>	<u>l</u> is
located at	the sou	thwest	t corner o	of Bui	lding BE	K (ACL	Dep	art	ment).		
Unit characthow waste i	teristi s initi	cs (co	nstruction	n, cap : Thi	acity, s	s ize, a ill is	ge, 75	data × 1	es o :	f op	era wa:	tion,
in operation	n betwe	en th	e years of	£ 1942	and 195	51.	<u></u>					
						<u>.</u>	·					
												
												
Wastes Mana Waste Code,												
indicating	what w	aste w	as placed	in th	is fill							
····												
Surface de secondary o											nte	grity,
												
												
			<u> </u>									
												

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION SWMU #26 AND CHARACTERIZATION WORKSHEET

Facility:	Monsanto-Krummrich	Date:		9/11/9	2	
Inspector:		Photo	Taken: Y	N	to N S	E W
Unit Name:	"Old Dump" (or Site #1)					
LDF Unit:	or N Type of U	nit: Facil	lity landf	ill		
Location (id	lentify deparmtent and or	rientation	of unit):	This	area	is
located on	the southeast corner of	BBW and ext	ends acro	ss 5tl	n Stree	t in
the southwe	est area of the plant.					
Unit characthow waste i	teristics (construction, s initiated into unit):	capacity, s The landfi	size, age, ll is appr	dates oxima	of ope	ration,
150' x 175	. A 1942 plant map indic	cates that	this fill	was c	losed a	nd
filled in 1	oy that year. The "old o	dump" was p	rimarily u	sed f	or the	
disposal o	f Nitrochlorobenzene was	te. A store	room and p	art o	f the A	CL
unit were	ouilt on top of the fill	•	·			
	.					
Waste Code,	ged (process description physical state [solid, h as 2-Nitrobiphenyl and on in that area.	liquid, slu	dge, etc.]): <u>N</u>	<u>itrochlo</u>	robenzen
	scription (concrete, as containment description,					tegrity,
·	**************************************	· ·			.	
	<u> </u>					
				·-··		
		1				
©0						

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION SWMU #33 AND CHARACTERIZATION WORKSHEET

Facility:	Monsan	to-Kr	ımmrich	Date:		9,	/14/	92							
Inspector:				Photo	Taken:	Y	N	to	N	S E	W				
Unit Name:	"Old P	ond"	· · · · · · · · · · · · · · · · · · ·												
LDF Unit:	y or	N	Type of Unit:	Surfa	ce Impo	undı	ment	<u>. </u>			-				
Location (id	dentify	depar	mtent and orien	entation of unit): This site is											
located in	the sou	thwes	t central area c	f the r	olant di	rec	tly	und	er_						
Building BB	Z (Stor	eroom).					_							
			nstruction, capa into unit): The												
The only re	cords f	ound	indicate that th	is fil	l was cl	ose	d a	nd f	<u>ill</u>	ed	····				
by 1942.															
											··-·				
					*****		-								
			description, con ate (solid, liqu												
were found	taht id	lentif	ied the materia	l in the	e pond.										
					·			<u>-</u> -			, 				
Surface des	scripti contains	on (c nent d	oncrete, asphal escription, inte	t, etc.	, age, age, to	sti	ruct	ura hy):	1 i	nte	grity,				
4.															

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION SWMU #33 AND CHARACTERIZATION WORKSHEET

acility:	Monsan	to-Kru	mmrich		Date:		9/	/14/	92			
nspector: Photo Taken: Y N to N S		S E	W									
Init Name:	"Old P	ond"								·		
DF Unit:	Y or	N	Type o	f Unit:	Surfa	ce Impo	undr	nent	<u>:</u>			
Location (i	dentify	depar	mtent an	d orient	tation	of unit)	:	Th	s s	ite	is	
located in	the sou	thwest	central	area o	f the p	lant di	rec	tly	und	er		
Building BE	3Z (Stor	eroom)	•									
Unit charac	teristi s initi	cs (com ated i	nstruction nto unit	on, capa): The	unit is	size, ag approx	e, o	date tely	es of	E op	era	tion,
The only re	ecords f	ound i	indicate	that th	is fill	was cl	ose	d a	nd f	ill∈	<u>ed</u>	
by 1942.					<u>.</u>							
Wastes Mana Waste Code,												
were found			•				_					
200.10									· 	······································		
												
		<u> </u>			<u> </u>							
Surface de secondary	escripti contain	on (co ment de	oncrete, escription	asphali on, inte	t, etc. grity,	, age, age, to	pog	ruct	ura. hy):	L 11	ıte	grity
										···		-
			· · · · · · · · · · · · · · · · · · ·			·						
			-									

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION SWMU #28 AND CHARACTERIZATION WORKSHEET

Facility:	Monsan	to-Kru	ummrich			Date:						9	/14	1/92	!
Inspector:		····				Photo	Tak	en:	Y	N	to	N	S	E W	
Unit Name:	Phenol	Resid	due Site												
LDF Unit: Y	or	N	Type c	of U	nit:	Land	fill	·							
Location (id	lentify	depar	mtent an	nd o	rient	tation	of i	ınit)	:	Th	e ph	eno	1	res	ldue
site is loc	ated ir	the w	vest cen	tra	l are	a of t	he p	lant	, n	ear	3rd	an	d I	н	_
Streets.														<u>-</u>	
Unit charact	eristics initia	cs (com ated i	nstructi nto unit	on,	capa The	city, phenol	size res	, age	e, o	iate te	s of	f or	er S	ati	on,
75' x 100'	and was	close	ed befor	e 1	951.	This	site	hol	ds	was	tes				
associated	with th	ne prod	duciton	of	pheno	ol. Man	ufac	turi	ng	uni	ts a	nd	ro	ads	
are constru	icted or	n top o	of this	sit	e.										
							, <u>-</u>								
								·							
															
Wastes Manae Waste Code,															
this site w	as ass	ociate	d with t	he	produ	uction	of p	henc	1.						
			 												
Surface des	scripti ontainm	on (co nent de	oncrete, escripti	as on,	phali inte	etc.	., a age	ge, , to	sti po g	ruct	ural hy):	l i	nto	egr	ity,
										- -		-			
						<u></u>									
			•	<u>, · `</u>											

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION SWMU #31 AND CHARACTERIZATION WORKSHEET

acility: Monsanto-Krummrich nspector:			Date:		9/	11/	92					
Inspector:	spector:					Taken:	Y	N	to	N	S E	W
Unit Name:	Old Di	scharg	e Pond					·				
LDF Unit:	Y or	N	туре о	f Unit:	Surfa	ce Impo	undr	ent		 .		
Location (i	dentify	depar	mtent an	d orien	tation	of unit) :	Thi	s si	te	is	
located eas	t and r	north o	f Depart	ment 27	7		·					
Unit charac												tion,
125' x 125'	and wa	as used	bv the	Sulfuri	c Acid	Departm	ent	fro	m			
1942 until												
												
			· · · · · · · · · · · · · · · · · · ·									
			<u> </u>	-				-				
Wastes Mana Waste Code,	physi	cal sta	te [soli	ld, liqu	id, slu	ı dge, et						
exists on t	he mat	erial d	lischarge	d into	that ar	ea.				-		
						 						
Surface de	script	ion (co	oncrete,	asphal	t, etc.	, age,	sti	ruct	ura hy):	l i	nte	grity,
				· · · · · · · · · · · · · · · · · · ·						<u></u>		
		"		 								
				·								
				, - >								

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION SWMU #62 AND CHARACTERIZATION WORKSHEET

Facility:	Monsan		_ Date:		9,	/14/	/92					
Inspector:	pector:					Taken:	Y	N	to	N 8	S E	W
Unit Name:	Sulfat	e Pile										_
LDF Unit: Y	or or	N	Type o	f Unit	: Waste	Pile						
Location (id	lentify	depar	ntent an	d orie	ntation	of unit)	:	The	sul	fate	pi	<u>le</u> was
part of the	Phenol	Depar	tment.	Thisa	rea curr	ently is	s pa	art	of i	Depa	rti	ent
277.												
Unit charact	s initia	ated in	nto unit	:): <u>Th</u> :	is site s	hows up	on	a :	1938	pla	nt	
drawing. F	rom the	drawi	ng, it s	seems t	that the	sulfate	pi.	le v	vas	part	: of	the
older Pheno	l Depar	tment.				•			·			
						<u> </u>						 ,
				· · · · · · · · · · · · · · · · · · ·								
Wastes Manag Waste Code,	ged (pro	ocess d	lescript te [soli	ion, c	ommercia quid, slu	l chemic	al :	name proj	e, El	PA H g to	aza th	rdous e 1938
drawing, so	dium su	lfite	was sto	red the	ere. A th	at time	, s	odi	um s	ulfi	te	was a
byproduct f	rom the	produ	ction of	f Pheno	ol							
Surface des										in	te	grity,
	· · · · · · · · · · · · · · · · · · ·								-			
												
	·		· · · · · ·					-				
	· · · · · · · · · · · · · · · · · · ·											

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION SWMU #63 AND CHARACTERIZATION WORKSHEET

Facility:	Monsar	nto-Kr	ummrich		Date:		9	/15	/92			
Inspector:					Photo	Taken:	Y	N	to	n s	E	W
Unit Name:	Borrov	/ Pit										
LDF Unit: Y	or	N	Type of	Unit:	Faci	lity Lan	dfi	11_				
Location (id	entify	depar	mtent and	orien	tation	of unit)	:	Th:	ls si	te i	s l	<u>oc</u> ated
south of th	e ACL o	coolin	g towers i	n the	southwe	estern s	ect	ion	of	the	pl	ant.
Unit charact how waste is	initi	ated i	.nto unit):	: The	only ir	formati	on a	abou	t th	ie bo	rr	ow pit
is on a 194	2 faci	lity m	ap. The bo	rrow	pit was	an area	wh	ere	soi	l wa	s_	taken
from to bui	ld up o	other	low spots	in the	e plant	There	is	so	me s	pecu	la	tion
that the bo	rrow p	it was	filled ir	with	cinder	s from t	he	pow	erho	use.		
Wastes Manag												
Waste Code, No availabl	_	al Sta	ice (solid	, 11qu	ila, stu	age, et	c.] ;) • _				
NO AVAITABL	<u>e</u>	·			 							
Surface des	criptiontainm	on (co	oncrete, a	sphal,	t, etc.	, age, age, to	str pog:	uct	ural	in	tec	grity,
												
				``								
			• 4									

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION SWMU #64 AND CHARACTERIZATION WORKSHEET

Facility:	Monsar		Date:		9	/12	/92					
Inspector:					Photo	Taken:	Y	N	to	N	S E	W
Unit Name:	Spray	Pond										
LDF Unit: Y	or or	N	Type of	Unit:	Surfa	ace Impo	und	men	t			
Location (id	lentify	depar	mtent and	orien	tation	of unit)	:	Th	e sp	ray	ро	nd was
located in	the sou	theas	tern corn	er of t	he fac	ility.						
	···											
Unit charact how waste is	eristi initi	cs (co: ated i	nstruction nto unit)	n, capa : The	spray p	size, ag	e, d	iate ed t	s of	ore	era an	tion,
non-contact	cooli	ng wat	er that w	as circ	culated	through	co	oli	ng t	owe	rs.	
	· · · · · · · · · · · · · · · · · · ·											
						<u> </u>		·				
	-											
+				·					<u>.</u>			
Wastes Manag Waste Code,												
									<u></u>			·
Surface des	criptiontains	on (co	oncrete, a	asphalt n, inte	etc.	, age, age, to	str pog:	ruct	ural	. i:	nte	grity,
						 ·—		.=				
	······································		•	•						· · · ·		
				,				-	-			
			-									

SWMU #32

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION AND CHARACTERIZATION WORKSHEET

Facility: Monsanto-Krummrich					Date:			9	/11/	92					
Inspector:	spector:						Т	aken:	Y	N	to	N	s e	W	
Unit Name:	Sulfat	e Pond	l												-
LDF Unit:	Y or	N	Туре	of T	Unit:	Surfa	306	e Impo	und	nent	<u>-</u>				
Location (id	dentify	depar	mtent a	and o	orient	tation	of	unit) :	Th	ls s	ite	is		
located dir	ectly e	east of	Depart	tmen	t 277	<u> </u>									_
Unit characthow waste i	t eristi s initi	cs (co	nstruct .nto uni	ion,	, capa The	city, sulfate	si:	ze, ag oond w	e ,	date	es of	the	era	ı ti	 on,
that manufa	ctured	pheno	l. The	app	roxim	ately :	si	ze of	the	poi	nd w	as			
300' x 75'.	The p	ond wa	as opera	atio	nal f	rom 19	42	to 19	52.					_	
			_					•							
					<u></u>										
															
Wastes Mana Waste Code,	ged (pr	ocess	descrip	tion	n, con liqu	mercia	ıl udq	ch e mio y e , et	c.]	nam):	e, E This	PA I	iaz: nd	ard	lous
contained s	odium :	sulfat	e												
		_		•											
Surface des	scripti contain	on (co	oncrete	, as	sphali	t, etc	. ,	age, ge, to	sti	ruct	ura: hy):	1 i:	nte	gr:	ity,
		· · · · · · · · · · · · · · · · · · ·						 ,							
		_ _						 -							
		 -						 			· · · · · · · · · · · · · · · · · · ·				
								 							

SWMU #6

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION AND CHARACTERIZATION WORKSHEET

Facility:	Monsanto	-Krummrich		Date:			·- <u>-</u>			9	/10/92
Inspector:			1	Photo	Taken	. Y	N	to	N	S E	W
Unit Name:	Steamer	Overhead Tan	k - Item	407							
LDF Unit:	or h	Type of	Unit:	Stora	age Ta	nk					
Location (id	dentify de	parmtent and	orienta	tion o	of uni	t):	The	e ste	ame	r ov	<u>er</u> head
tank was lo	ocated in	Department 2	38.		 -						
											
Unit charact how waste is	teristics s initiate	(constructio	n, capaci : The s	i ty, s teame	ize, a	i ge, head	d ate tan	s of	op tem	era 40	tion, 7, was
a 15,000 ga	allon RFP	(Fiberglass	Reinforc	ed Pla	astic)	tan	۲.	The	tan	k w	as
entirely al	oove grour	nd and diked.	The wa	ste s	tored	in th	ne t	ank	was	an	
ignitable s	waste (DOC	1) and was o	generated	from	the d	isti	llat	ion	of	but	yl
		he compositi									
Chloride, from servi		nylamine. Th	e tank w	as de	commis	sione	ed a	nd r	emo	ved	
Waste Code,	physical	ess descripti state [solic nitable liqui	d, liquid	, slu							
secondary c	ontainmen	(concrete, t description	n, integr	ity,	age, t	st:	ruct	ural		nte	grity,
	· · · · · · · · · · · · · · · · · · ·										
——————————————————————————————————————	· · · · · · · · ·					· · · · · · · · · · · · · · · · · · ·					
		***	`								

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION SWMU #49 AND CHARACTERIZATION WORKSHEET

Facility:	Monsar	nto-Kru	mmrich	_ Date:		9	/15	/92				
Inspector:		· · · · · · · · · · · · · · · · · · ·			Photo	Taken:	Y	N	to	N S	E	W
Unit Name:	South	Lot Dr	um Sit	e								
LDF Unit: Y	or	N	Type	of Unit	_Faci	lity Lan	dfi	11				 -
Location (id	lentify	depar	ntent a	nd orie	ntation	of unit):	Th	is si	te i	<u>s 1</u>	ocated
in the sout	hwester	n area	of the	e plant,	south c	f 5th S	tree	et n	ear	the	5t	h and
H Street in	tersect	tion.										
Unit charact	eristi initi	cs (cor ated i	struct nto uni	ion, car t): The	e south	s ize, ag lot drum	e, si	date	s of	ound	era 1 i	tion, n mid-
1986 during	const	ruction	of an	additio	on to th	e ACL co	oli	ng	towe	r. 3	0	drums
of waste ma	terial	were i	ecover	ed from	this ar	ea. The	ere	is	a no	inf	or	mation
available c	oncern	ing the	area n	measurem	ent. How	wever, d	uri	ng t	he d	rum	re	covery
excavation,	a dep	th of	10' was	reached	d. A coo	ling tow	ver	and	ass	ocia	ite	<u>d</u>
buildings a	re now	that a	area.	:								
Wastes Manac Waste Code,												
Surface des										l ir	ıte	grity,
		** <u></u>										
le d				=	· <u>-</u>							

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION SWMU #68 AND CHARACTERIZATION WORKSHEET

Facility:	lity: Monsanto-Krummrich						Date: 8/6/92						
Inspector:		···		Photo	Taken:	Y	N	to	N a	S E	W		
Unit Name:	ACL	Wastewa	ter Tr	eatn	ment								
LDF Unit:	Y OI	e n	Туре	of	Unit:	Waste	water T	rea	tmer	nt			
Location (i	denti	fy depar	mtent	and	orien	tation	of unit)	:	ACI	L (A	ctiv	/at	ed
Chlorine)	produc	t depar	tment										
											 -		
Unit charac how waste i	terist s ini	cics (co	nstruc into u	tion	n, cap : Two	acity, s	ize, ag 000 gall	e, don,	tit	s of	op um	era	tion,
construction	on rea	ctor ve	ssels.	Cor	nstruc	tion and	d operat	ion	be	gan	in :	198	3.
Continuous	opera	tion, b	ased c	n A	CL pro	duction	rate. C	hlo	rin	e-co	nta:	ini	ng
wastewater	s grav	vity-flo	w thro	ugh	depar	tment se	ewers to	th	e r	eact	ors	, w	hich
are contain chemistry to the POT	yield												
Wastes Mana Waste Code, containing	phys	ical st	ate [s	olid	, liq	uid, slu	dge, etc	c.])	: _	Chlo	rin	e-	
(sodium hy	pochlo	orite so	lution	1; R	CRA Co	de D002	; interm	itt	ent).			
	·												
Surface des											. ir	ite	grity,
Concrete p	aved;	reactor	s cont	cain	ed wit	hin a s	ealed co	ncr	ete	pit		<u></u>	
													
				47.41	•								
				1-									
Table 1					1								

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION SWMU #69 AND CHARACTERIZATION WORKSHEET

Facility:	Mon	sant	o-Krui	mmrich			Date:9/16				16/92					
Inspector:						Photo	Take	n:	Y	N	to	N	s E	W		
Unit Name:	San	tofl	ex Se	parato	r Sı	dur						· <u>-</u> -				
LDF Unit:	Y	or	N	Туре	of	Unit:	Waste	water	Pr	etr	eat	ment	<u> </u>			•
Location (i	dent	ify	depar	mtent	and	orien	tation	of un	it)	:	Dep	artm	ent	. 27	<u>7'</u>	s
Santoflex s	ump	is l	ocate	d on t	he 1	northea	ast cor	ner o	£ 3	rd	and	H S	tre	ets		
			 			 										
Unit charac																on,
opeation in	12/	<u>86-1</u>	/87.	Wastew	ate	r from	the un	it co	lle	cts	at	the	su	mp.		
Undissolved	org	anic	s are	separ	ate	d in th	ne firs	t sec	tio	n o	ft	he p	oit.	Th	e	
wastewater	then	und	erflo	ws to	the	other	sectio	n of	the	su	mp	and	eve	ntu	ıal	<u>ly</u>
to the sewe Tank (#595) constructed	. Th	e su	mp me	asures	ap	proxima									<u>du</u>	<u>e</u>
Wastes Mana Waste Code, ketones (ME	ig ed phy	(pro ysica	cess (descri	ptio olid	on, con , liqu	id, slu									
Surface de secondary o													l i	nte	gr:	ity,
The area th	at s	urro	unds	the su	mp	is con	crete a	nd as	pha	ılt.						
			· · · · · · · · · · · · · · · · · · ·			·										
						<u> </u>					·					
	·		 													

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION NEW SWMU #1 AND CHARACTERIZATION WORKSHEET

Facility:	Monsanto-K	rummrich		Date:		9/1	6/92			
Inspector:				Photo T	aken:	Y :	N to	n s	E W	ī
Unit Name:	Phosphorus	Trichlori	de Manuí	acturing	Unit	(Dep	t. 243)		_
LDF Unit:	Y or N	Type o	f Unit:							-
Location (id	dentify dep	armtent an	d orient	ation of	unit)	: _	The	PC1,		-
Department v	was located	in the ea	stern se	ection of	the p	plant	at B	and	2nd	
Streets.			·	<u>,,, , , , , , , , , , , , , , , , , , </u>						
Unit charact how waste is	teristics (d s initiated	constructi into unit	on, capa): <u>Depar</u>	city, siz	z e, ag 3 was	e, da a ma	tes of nufact	ope urin	rati g	on,
unit that p	roduced Pho	sphorus Tr	ichlorio	le or PCl	3. PCl	, was	made	by		
reacting ph	osphorus wi	th chlorin	e in the	presenc	e of I	PC13.	The d	epar	<u>t-</u>	
ment was in	operation	from the e	arly to	mid 1930	-s unt	til 1	ate 19	91		
when the un	it was shut	down. Depa	rtment 2	243 was d	ismant	tled	in 199	2.		
Wastes Manac Waste Code,										
waste PCl3,	waste Phos	ohorus, wa	ste oil,	waste Tl	hermin	101.	In the	193	0's	-
1960's Aroc	hlors were	used.		·			···-			
						 	 			
Surface des secondary c	cription (ontainment	concrete, descriptio	asphalt n, integ	, etc., grity, ag	age, e, to	stru pogra	ctural	int	egr	ity,
The surface	of the dep	artment wa	s concre	ete and a	sphal	t				
			· — . — — —							
			· · · · · · · · · · · · · · · · · · ·							
					· · · · · · · · · · · · · · · · · · ·		<u></u>			

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION NEW SWMU #2 AND CHARACTERIZATION WORKSHEET

Facility: Monsanto-Krummrich Date: 9/16/92
Inspector: Photo Taken: Y N to N S E W
Unit Name: Rail Tank Car Repair Track (or Rip Track)
LDF Unit: Y or N Type of Unit: Wastewater Collection Unit
Location (identify department and orientation of unit): The repair track
in located in the south central section of the manufacturing area.
Unit characteristics (construction, capacity, size, age, dates of operation how waste is initiated into unit): The repair track serves as a rail tank
car inspection, cleaning and repair station. After each use, the rail cars
are returned to Krummrich. These tank cars are taken to the Rip Track and
washed internally using a specialized hydroblast unit. After the tank car
is thoroughly cleaned, the water and contaminates are flsuhed to the sewer
The sewer box is constructed of brick and concrete.
Wastes Managed (process description, commercial chemical name, EPA Hazardou Waste Code, physical state [solid, liquid, sludge, etc.] etc.]
contain a residual amount of product chemicals that are manufactured at
Krummrich.
Surface description (concrete, asphalt, etc., age, structural integrity secondary containment description, integrity, age, topography): The sewer box is constructed of brick, morter and concrete. The sewer is
concrete. The area around the sewer box is chat (crushed limestone rock).

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION NEW SWMU #3 AND CHARACTERIZATION WORKSHEET

Facility:	Mon	sant	o-Kru	mmrich	Date: 9/9/92										
Inspector:							Photo	T	aken	: Y	N	to	N	S E	W
Unit Name:	BI	Lot	(Bone	Yard)										<i>-</i>	
LDF Unit:	Y	or	N	Туре	of	Unit:	Surp	lus	Equ	ipme	nt s	tora	age		
Location (i	dent	ify o	deparm	ntent	and	orien	tation	of	uni	t):	The	BI	lot	: is	<u>. </u>
locate din	the	sout	h cen	tral a	rea	of th	e plan	<u>t.</u>							
								.—	<u>,</u>					=:	
Unit character how waste i	teri s in	stics itia	s (con ted in	struc nto un	tion	, capa The	city, BI lot	si:	ze, a	g e, app	date	s of	op ely	era 1-2	tion,
acres. Some	are	as a	re co	vered	with	conc	rete,	oth	ner a	reas	hav	re a	cha	t	
surface.								_							
			=						<u>.</u>		_				
	_														
Wastes Mana Waste Code,															
managed at	this	sit	e. 01	nly cl	ean	surpl	us equ	ipn	nent	is s	tore	ed_he	ere	(ta	nks,
steam lines	, et	c.).	Some	e 55 g	gallo	n dru	ms of (oil	and	The	rmir	nol a	are	sto	red
here on rac	ks a	bove	a co	ncrete	pad	l. Th	e oil a	and	l The	rmin	ol i	ls no	ot v	vast	.e
Surface des	scri _l	ption inme	ı (com nt de:	ncrete script	, as	sphalt inte	, etc. grity,	., aç	age, ge, t	st: opog	ruct	ural ny):	ir	ateg	rity,
Concrete/ch	at					 .									
														<u>, </u>	
					• 4										

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION NEW SWMU #4 AND CHARACTERIZATION WORKSHEET

Facility:	Monsanto	-Krummri	ch	Date: 9/16/92						
Inspector:				Photo	Taken:	Y N	to	N	S E	W
Unit Name:	Departme	nt 245 To	ote Bin Was	h Rack						
LDF Unit: Y	or 1	м тур	e of Unit:			· · · · · · · · · · · · · · · · · · ·				_
Location (id	entify de	eparmtent	and orien	tation	of unit)	: <u>D</u>	epart	ment	24	15 is
located in t	he south	central	section of	the pl	ant at D	and	5th S	tre	ets.	<u>Th</u> e
wash rack is	s in the	southwest	section o	of the u	ınit.					
Unit charact how waste is	eristics initiate	(construe ed into u	ction, capa nit): The	wash ra	s ize, ag ack that	e, dat	es o	f op tly	era in	tion,
was construc	cted of m	etal and	concrete.	Its fur	nction is	s to	vash	tote	≥ bi	ns
that have be	en retur	ned from	customers	with re	sidual	P ₂ S ₅ i	n the	m . '	The	tote
bins are pla	aced on t	he rack a	and are was	hed int	ernally	with	wate	r.	The	<u> </u>
water collections to the bin.										
Wastes Manag Waste Code, water. (H ₂ S	physical	state (s	olid, liqu	id, slu	dge, etc	:. ₹ } \$5	and			rdous
Surface des secondary co	ntainmen	t descrip	tion, inte	grity,	age, to	pograj	ohy):			rity,

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION NEW SWMU #5 AND CHARACTERIZATION WORKSHEET

Facility: Monsanto-Krummrich							Date:	:		9/:	17/9	2				
Inspector:							Photo	o	Taken:	Y	N	to	N	s	E	W
Unit Name:	D <u>e</u> r	artme	ent 24	0 Load	ling	Dock										_
LDF Unit:	Y	or	N	Туре	e of	Unit										
Location (iden	tify	depar	mtent	and	orie	ntation	c	of unit): [<u>This</u>	si	ce :	is		_
l <u>ocated on</u>	D St	reet	on th	ie east	t si	de of	the tar	nk	cs.	** .						
Unit charachow waste area: one bucket hang drums that to a product to bucket hang site. Where leaked into product, Sa Wastes Man Waste Code burmed area	conc ing were hat ing the the	on a seen is no of the ere is burn flex (pro	was over pump are pump so long pump so no content are pump so no con	ver two that a product ger pro p is us concern tea. Th	o drappe t droduc sed n ov ne m	ums locared ums. The aums.	cated to be cated They cor These dia sample a sample a that	ir at	the action the bulleaked	rea lo DA e bo cker from	and eak. (Dideing olle t, t m th	iter l a ! lecy g sar ecte the property ater	ns 5 ga and	in two nil ed. ron p h wa	th lor lir m t	ne), The
Surface de secondary	cont	ainmo	ent de	escrip	tion	, int	egrity,	ě	age, to	pog	rapi	ny):				_
			·· ·													
				 												
																

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION NEW SWMU #6 AND CHARACTERIZATION WORKSHEET

Facility:	Monsanto-Krummi	rich	Date:		9/	17/	92				
Inspector:			Photo	Taken:	Y	N	to	N	S E	W	
Unit Name:	PCB Substation						_				
LDF Unit: 3	or N I	ype of Unit:			<u></u> .						
Location (id	lentify deparmte	ent and orier	ntation	of unit)	:	The	sul	osta	tic	on_	
(transforme	r) is located or	the northea	ast corn	er of 3r	d a	nd	Fall	ling	<u></u>		
Springs Road	d										
Unit charact how waste is	ceristics (const s initiated into	ruction, cap unit): This	acity, s s unit i	size, age s approx	e, d	l ate itel	s of y 30	op ye	era	tic 5 0	on,
and has been	n out of service	e for 4 years	s. For 8	years p	ric	r f	rom	the	e da	ate	<u>it</u>
was removed	from service, t	this unit was	s used i	n servic	e t	o t	he p	owe	rho	ous	<u>e</u>
at this site	e. Dielectric fl	luid contain:	ing PCB'	s were	lrai	ned	in	the	e mi	id	to_
late 1970's	•							_			
	ged (process des physical state										
associated	with this site.	Dielectric	fluid c	ontainir	ıg F	CB'	s we	ere	dra	ain	ed
in the mid	to late 1970's.	The transfor	rmer doe	s cntair	n di	.ele	ctr	ic 1	lu	id.	
secondary c	cription (concrontainment description)	ription, into	egrity,	age, top	pogr	aph	(Ā):			gri	ty,
				<u> </u>	/			 ' -			_
									_		
		·	·								
											

NEW SWMU #7

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION AND CHARACTERIZATION WORKSHEET

Facility: Monsanto-Krummrich					Date:			9/8/	92			
Inspector:					Photo	Taken	Y	N	to	n s	E W	
Unit Name:	"Big	Mo"	Benzene Tanl	k								
LDF Unit: Y	or	N	Type of	Unit:	2.3	Million	n Gai	llon	Ben	zene	Tank	
Location (id	entify	depa	armtent and	orient	ation	of unit	:):	So	uthe	ast	corne	r
of the plan	t.											_
												
Unit charact how waste is	eristi initi	.cs (d	construction into unit)	capa Big	city, s Mo tan	s ize, a nk is a	g e , (d ate year	s of	ope car	ratio bon	n,
steel tank	holds	2.3	million gal	lons of	benze	ne. The	e ber	nzen	e is	ar	aw	
material fe	edsto	k fo	r teh Chlor	obenzer	es uni	t. The	e tar	nk i	s st	ill		
in benzene	servi	ce.										
			· · · · · · · · · · · · · · · · · · ·									_
												
Wastes Manag Waste Code,												us —
												_
			7-7									
Surface des	cripti ontain	on (concrete, a description	sphalt, integ	, etc. grity,	, age,	str pog:	uct	ural	int	egrit	у,
The tank si	ts bel	nind	a 4 1/2" di	ke wall	l made	of cond	crete	e th	at i	s re	infor	ced
with rebar.	The	floo	r of the di	ke is e	earther	n, com	pose	d of	sar	d an	d cla	<u>y .</u>
-												_
												

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION NEW SWMU #8 AND CHARACTERIZATION WORKSHEET

Facility:	Monsanto-Krumm	rich	_ Date:		9/:	17/92		-
Inspector:			Photo	Taken:	Y	N to	N S E	e w
Unit Name:	Department 240	Surface Dis	charge A	rea				
LDF Unit: Y	or N T	Type of Unit	·	·				
Location (id	entify deparmte	ent and ories	ntation (of unit)	: _	This s	ite is	
located on	the west side o	f Department	240 on	H Stree	<u>t.</u>		_ 	
				·	·			
how waste is material on next to the in this depare moved the process, the leaked and the material redesigned rust surrous. Wastes Management	eristics (constantiated into the side of Debuilding. The sartment. Santof throughout the depellets are the pellets fellor and reapired. (conding it.)	partment 240 material is lex Pastille epartment on in hoppers l to the roo ne side of One photogra	and on Santofle sare so conveyo on the so the buston shows	RFA vis the asp ex Pasti plid pel ors. At roof. At sun mel ilding. a rain	it, halt lles lets one t on ted The wat	and g , a pr . Thes point e time the pe hoppe er pip	ency nravel oduce e pell in the the llets er has e wit	nted area made ets hopper and been h
·						The	materi	al of
concern is	Santoflex Pasti	lles.	1					
Surface des	cription (concr ontainment descr	cete, asphal ription, int	t, etc. egrity,	, age, age, to	stru	ctural	inte	grity,
Asphalt and	gravel.							
					· · · · · · · · · · · · · · · · · · ·			·
		· · · · ·						
· -		1						. —

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION SWMU #69 AND CHARACTERIZATION WORKSHEET

Facility:	Monsant	o-Krum	mrich		Date:		9/	16/9	2			
Inspector:					Photo	Taken:	Y	N	to	N	S E	W
Unit Name:	Santof]	ex Sep	arator s	Sump								_
LDF Unit:	Y or	N	Type o	f Unit:	Waster	water Pr	etr	eati	ment			
Location (i	dentify	deparm	itent and	d orien	tation	of unit)	:	Dep	artm	<u>ent</u>	27	<u>7'</u> s
Santoflex s	ump is]	Located	on the	northea	ast cor	ner of 3	rd	and	НS	tre	<u>ets</u>	•
												
Unit charac												
opeation in	12/86-	1/87. W	Vastewat	er from	the un	it colle	cts	at	the	su	mp.	
Undissolved	organio	cs are	separat	ed in t	he firs	t section	n o	f t	he p	it.	Th	<u>e</u>
wastewater	then und	derflow	vs to th	e other	sectio	n of the	su	mp	and	eve	ntu	ally
to the sewer Tank (#595)	. The st	mp mea	sures a	pproxim								due
Wastes Mana Waste Code												
ketones (MI	EK, MIBK	, MIAK	and wa	stewate	r.							
												
					······································							
Surface de secondary											nte	;rity,
The area th	nat surr	ounds	the sump	is con	crete a	nd aspha	alt.	<u> </u>				
								<u> </u>				
				· .	_ 			<u>-</u> -				

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION AND CHARACTERIZATION WORKSHEET

Facility:	Monsanto-	-Krummri	ch		Date:		
Inspector:					Photo '	Taken:	Y
Unit Name:	Facility	Landfil	1 North	west A	rea		
LDF Unit:	Y or	r n	ype of	Unit:	Suspect	ed Land	lfi
Location (identify	deparmte	ent and	orient	ation o	f unit):
has been re	ported to	be in t	he nort	hwest	corner	of the	fa
Unit chara							
and Eckhard fill in the were based files that agency, we that sugges	northwes on non-co discounts have many	t corner nclusive the pre documen	of the evider of the evidence of the e	e facil nce. A of this rt A fi	ity. Ap ttached partic lings a	parent is a ular f nd the	ly le il
boring stud							
Wastes Man Waste Code							
							•
Surface d	escriptio containme	n (conc ent desc	rete, a	sphalt, integ	, etc., grity, a	age,	
***************************************	~ ************************************						
				 			

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION AND CHARACTERIZATION WORKSHEET

Facility:	Monsant	o-Krum	mrich		Date:		9/17
Inspector:		 			Photo	Taken:	A 1
Unit Name:	Spent C	arbon '	Tote Bir	Storag	e Pad		
LDF Unit: Y	or or	N	Type of	Unit:	Waste	Accumul	atio
Location (id	ientify (deparm	tent and	orient	ation	of unit)	: <u>T</u>
located on D	Street	betwe	en 3rd a	nd 4th	Streets	5.	
				· · · · · · · · · · · · · · · · · · ·			
Unit charact how waste is	eristic: s initia	s (cons	structio to unit)	n, capa : Tote	city, s	i ze, ag ontainir	e, d
Department 2	233 are	taken	to this	area an	d spott	ed. Fro	om t
taken to BBI	J waste	wareho	use. Th	e tote	bins ar	ce moved	l fr
within 3 day	/s.	 	·		`		
Wastes Manag Waste Code,							
contaminated	d with b	enzene	and HC	. •	 		
Surface des	cription ontainme	n (con ent des	crete, cription	asphalt a, integ	, etc. grity,	, age, age, to	s pc
This site is	constr	ucted	of aspha	lt/conc	ret.		
		· · · · · · · · · · · · · · · · · · ·					
		· · · · · · · · · · · · · · · · · · ·	***	*			-

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION NEW SWMU #12 AND CHARACTERIZATION WORKSHEET

Facility:	Monsan	to-Krum	mrich		Date:					9/	<u>/17</u>	<u> 7</u> 92
Inspector:					Photo	Taken:	Y	N	to	N	s	E W
Unit Name:	Depart	ment 25	5 Waste	Water	Sump							
LDF Unit:	Y or	N	Туре о	f Unit:	Waste	Water (coll	ect	ion	Are	₃a	
Location (i	dentify	deparm	tent an	d orien	tation o	of unit	:	Thi	s si	te.	is	
located on	the sou	theast	corner	of 5th	and H S	treets.	 -		. , _			
												
Unit characthow waste is	teristio s initio	cs (consated in	structi to unit	on, capa :): The	acity, s sump was	ize, ag	e, d	late ed i	s of	: or 90 ;	er and	ation
opeaitons i	n late	1990, e	arly 19	91. Un	dissolve	ed organ	nice	s a	re s	epa	ıra	ted i
the pit and	waste 1	water u	nderflo	ws to t	he seco	nd secti	lon	of	the	sun	qn	and
eventually	to the	sewer.	The org	anics t	hat we	separate	ed a	re	coll	.ect	:ed	and
incinerated	. The s	ump mea	sures 1	2' x 10	' x 10'	(approx	kima	tel	y) a	ind	is	
constructed	of 1'	thick c	oncrete	·								
Wastes Manae Waste Code, undissolved	physic	al stat	e [soli	d, liqu	id, slu	dge, et						
Surface des secondary c	ontainm	ent des	criptic	on, inte	egrity,	age, to	pogr	aph		i1	nte	egri
		 										

etc.):					 				
									
					<u></u>		~~~~~~		
			·						
Potent distre		veget	ation	spe	cify	potent	cially	r im	pac
Releasetc.):								imp	act
		nave		Teu at	·	2166	•		
Remedi	ation	condu	ncted	(dates	s, met	hods,	proce	edure	. s
Ground	lwater	monit	oring	prese	nt:	v 1	N Nu	ımbeı	~ Q1
			_	_					
VSI Sa		,		,	/		- -		
VSI Sa		 							
VSI Sa									
VSI Sa	-				·			-,-,-	

NEW SV

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION AND CHARACTERIZATION WORKSHEET

Facility:	Monsant	o-Krummr	rich		Date:		9/9/9	92	
Inspector:					Photo	Taken:	Y N	to	n s
Unit Name:	Departm	ent 222	Drum Ac	cumulat	ion A	cea			
LDF Unit: 3	or	и т	Type of	Unit:	Drum A	Accumula	tion A	rea	
Location (id	dentify	deparmte	ent and	orienta	ation (of unit)	: Der	partmo	ent
located in t	the east	ern sect	ion of	the pla	ant.	The drum	accur	ulat	ion
located on t	he sout	h side c	of the d	lepartme	ent at	B and S	econd	Stre	et.
Unit charact how waste is	eristic s initia	s (const ted into	ruction unit):	The ac	city, s	ize, age ation ar	e, dat ea is	es of used	op as
temporary ho	olding a	rea whil	e trans	portion	for t	the wast	e is b	eing	ar
Waste drums	that ha	ve been	labelle	d and p	olaced	on pall.	ets ar	e bro	ouç
the accumula	ation ar	ea. The	waste	can be	held h	nere for	a max	cimum	0:
The drums ar	e then	transpor	ted to	waste v	varehou	ise. The	size	of t	he
varies with	the amo	unt of w	aste th	at is p	oackage	ed.			
Wastes Manag Waste Code, accumulated	physica	l state	[solid,	liqui	d, slu	dge, etc	:.]):	The '	sw
para nitroar	niline.	Oil (D01	.8, D035) Therr	ninol	(D008, D	018),	Para	
Aniline (DO?	77, and	ONCB Ric	h ONA R	Residue	(no co	odes).			
Surface des secondary c Concrete/asp	ontainme	nt desc	ription	, integ	rity,	age, to			-

RCRA FACILITY ASSESSMENT SWMU IDENTIFICATION AND CHARACTERIZATION WORKSHEET

Facility:	Monsanto-Kri	ummrich	Date:	9	/16/92	
Inspector:			Photo Taken:	y N	to N	SEW
Unit Name:	Phenol Tank	, Item #405			·	
LDF Unit: Y	or N	Type of Unit	: Wastewater S	torage	Tank	
Location (id	lentify depar	mtent and orie	ntation of unit): <u>Th</u>	e tank	sits
20 feet sou	thwest of Bu	ilding BR.	·			
·	·					
Unit charact how waste is	eristics (co s initiated i	nstruction, ca into unit): Tan	pacity, size, ac nk #405 was a 20	je, dat 0,000 g	es of o	peration,
tank (above	ground). Was	stewater contar	minated with phe	enol an	d other	
phenolic com	mpounds were	directed into	the tank, where	e is wa	s store	d until
being pumpe	d into the t	reatment tanks	(209 and 400).	This	tank wa	s taken
out of phen	ol service i	n 1981 and is	currently in Chl	Lorober	zene se	rvice.
	_					
Wastes Manaq Waste Code,	ged (process physical sta	description, cate [solid, lic	ommercial chemic quid, sludge, et	cal nam	le, EPA Wastewa	Hazardous iter con-
taminated w	ith phenol a	nd other pheno	lic compounds.			
		······································				
Surface des	cription (co	oncrete, aspha escription, in	lt, etc., age, tegrity, age, to	struc	tural i	ntegrity,
Tank 405 sa	t on a concr	ete pad with 6	"-8" curb.			
						
	 					
	· · · · · · · · · · · · · · · · · · ·					
=						